

Programming techniques explored

Games to type in and play

On the trail of the best adventures



COMPETITION
Twenty Roman Empires to be won

LORDS OF TIME

Joins our range of acclaimed pure-text puzzle adventures, at £9.90, for:

BBC 32K ***COMMODORE 64*** ***SPECTRUM*** 48K ***LYNX*** 48K ***NASCOM*** 32K ***ORIC*** 48K ***ATARI*** 32K

ADVENTURE REVIEWS

"Adventures which have a fast response time, are spectacular in the amount of detail and number of locations, and are available to cassette owners . . I am extremely impressed . . The Level 9 Adventures are superbly designed and programmed, the contents first rate. The implementation of Colossal Cave (Adventure) is nothing short of brilliant; rush out and buy it. While you're at it, buy their others too. Simply smashing!"
– *SOFT, Sept 83*

"I found Dungeon exceedingly well planned and written, with a fast response. There are well over 200 locations and the descriptions are both lengthy and interesting. The objects number about 100. It could therefore take some months to explore the whole network, giving many hours of enjoyment in the process."
– *C&VG, Sept 83*

"The descriptions are so good that few players could fail to be ensnared by the realism of the mythical worlds where they are the hero or heroine . . . great fun to play."
–*Which Micro?, Aug 83*

"My appetite has been whetted and I intend to get my own copy (of Snowball) to play."
– *What Micro?, Dec 83*

ADVENTURE REVIEWS

"This has to be the bargain of the year. If adventures are your game then this (Colossal Adventure) is your adventure."
– *HCW, 5 Sept 83*

"Colossal Adventure is simply superb. Anyone who wishes to use adventures in an educational setting really must use and see this program as it emulates Crowther and Wood's masterpiece so well. For those who wish to move onto another adventure of similar high quality, Dungeon Adventure is to be recommended. With more than 200 locations, 700 messages and 100 objects it will tease and delight!"
– *Educational Computing, Nov 83*

Colossal Adventure is included in Practical Computing's Top 10 games choice: "Poetic, moving and tough as hell."
– *PC, Dec 83*

"To sum up, Adventure Quest is a wonderful program, fast, exciting and challenging. If you like adventures then this one is for you"
– *NILUG # 1.3*

"Colossal Adventure . . For once here's a program that lives up to its name . . a masterful feat. Thoroughly recommended"
– *Computer Choice, Dec 83*

"wholly admirable"
– *Your Computer, Sept 83*

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THE LORDS OF TIME SAGA

7: LORDS OF TIME
Our congratulations to Sue Gazzard for her super design for this new time travel adventure through the ages of world history. Chill to the Ice-age, go romin' with Caeser's legions, shed light on the Dark Ages etc. etc. We'll be selling this game mail-order from January 1st.

Price: £9.90 each (inclusive)

Level 9 adventures are available from good computer shops, or mail-order from us at no extra charge. Please send order, or SAE for catalogue, to:

LEVEL 9 COMPUTING

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Please describe your Computer

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SUNSHINE

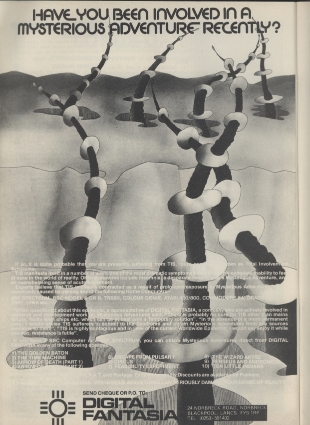
Adventures ● War Games ● Simulations

EDITORIAL

ONE OF THE DILEMMAS faced by a magazine such as *Micro Adventurer* is how much help to give readers. While you may be spending your time wondering which treasure has the greater value, we're spending ours wondering whether to tell you.

If we offer individuals help we'll reduce their frustration but we may also reduce their pleasure in solving the adventure. And clues we publish may be read by adventurers who would have preferred to pursue their own paths. We could, of course, print early warnings before the advice appears — as newscasters do when they advise sports fans to turn down the sound if they want to avoid hearing the result of a game to be televised later. So we could warn that a clue to the Hobbit was coming, advising readers keen to get out of the goblin's dungeon under their own steam to wear opaque glasses for the next few lines. Another possibility is to offer gnomic clues so that readers have to exercise some ingenuity in interpreting the advice. The risk here is that readers won't be able to tell when we're being gnomic and when we're just using fancy language. Writing about adventurers getting out of the dungeon under their own steam might lead to Thorin receiving more maltreatment than even he's entitled to. The other obvious risk is that elliptical clues can cause more confusion than they're worth — it's bad enough trying to get out of the dungeon without also having to unravel some helpful but obscure piece of advice.

One solution to this delimma is (surprise, surprise) to let readers sort it out for themselves — by using our Adventure Contact column. If you fill in the form then readers more successful than you will be able to come to your rescue. And if you read the entries then you may be able to do the rescuing. We'd like to extend this section so keep on sending the entries — and let us know how you get on once you've established contact. Another solution also requires readers' help. There are too many adventures on the market now for one magazine to know all the answers. And believe me we get stuck too — there's no sadder sight than a team of "experts" stymied before a TV set. It's even worse if you have to write a review of an adventure whose first phase defeats you, leaving no hope of solving the tenth in time to reach your deadline. So send us any advice you have to offer and we'll put it on file, or if you're willing to help with certain adventures write in and we'll publish your letter. Again we look forward to hearing from you.



HAVE YOU BEEN INVOLVED IN A MYSTERIOUS ADVENTURE RECENTLY?
If so, it is quite probable that you are presently suffering from TIS, more ... own as Total Involvement Syndrome.
TIS manifests itself in a number of ways, one of the most dramatic symptoms ... complete inability to feel at ease in the world of reality. Other symptoms include insomnia, a desparate need to play a Mysterious Adventure, and an overwhelming sense of acute enjoyment.
Experts believe that TIS is usually contracted as a result of prolonged exposure to Mysterious Adventures ... commonly caused by owning any of the following Home Computers:–
48K SPECTRUM, BBC MODEL A OR B, TRS80, COLOUR GENIE, ATARI 400/800, COMMODORE 64, DRAG... ZX81, LYNX etc.
When questioned about this epidemic, a representative of DIGITAL FANTASIA, a company who are actively involved in research and development work on Mysterious Adventures said, "There is probably no cure for TIS other than mains failure, faulty RAM chips etc. which can be at best only a Temporary solution". "In the absence of a more permanent cure, I would advise TIS sufferers to submit to the Syndrome and obtain Mysterious Adventures from any sources available to them". "TIS is highly contagious and in view of the current Worldwide Epidemic, I would say enjoy it while you can, resistance is futile".
If you have a BBC Computer or ... SPECTRUM, you can obtain Mysterious Adventures direct from DIGITAL FANTASIA in any of the following dosages:
1) THE GOLDEN BATON
2) THE TIME MACHINE
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8) THE WIZARD AKYRZ
9) PERSEUS AND ANDROMEDA
10) TEN LITTLE INDIANS
V.A.T. and Postage. ... Discounts are available for Pushers.
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LETTERS

Send your hints, successes, complaints and compliments to Letters Page, Micro Adventurer, 12-13 Little Newport St, London WC2R 3LD

Leisure time well spent

BEING semi-retired I thought that I would have to spend my leisure time knitting, reading or watching tv, but not any more.

I now spend my time deciding whether to kill the dragon with my bare hands, which can sometimes be amazingly successful, or looking for a key to open a door, cupboards or chests. You never know what's lying around the corner.

Although some of the graphic adventures are very good I still prefer the text-only ones where I can let my imagination paint the scenery. Your new magazine will certainly help me in my fireside adventures.

M. Maloney,
32 Beverley Rd,
Liverpool.

Finding an ending . . .

COULD A reader of this magazine please help me? I have The Hobbit adventure game. I start the game and I get all the equipment . . . the sword, rope, golden key, Thrain's key (small curious key), the map, golden ring, trolls' key, treasure. But when I arrive home I don't know how to END the game.

Darren Loren,
237 High St,
Henley-in-Arden,
Solihull,
West Midlands.

poses a riddle . . .

I HAVE had The Hobbit for about three months and have visited many of the places in the adventure from the comfortable tunnel-like hall and Rivendell to the Elves' Dungeon, the forest river and the magic door.

My highest score is 86%. If anyone cares to write to me at the address below and send a stamped addressed envelope, I can tell them a way out of the goblins' dungeon, a place where most people get stuck.

In return for that clue I would be pleased to find out how to get through the magic door and how to uncode Gollum's riddle. Which animal is it that has four feet in the morning, two at mid-day and three in the evening?

Adrian Jones,
Cotswold Avenue,
Kettering.

to fans of the Hobbit

I HAVE some queries about The Hobbit which I hope a reader might answer.

The first one I am surprised has not been asked before in other magazines: what is the function of the golden key? My brother and I have tried many things, but to no avail. Does it just increase your score and have no other function? Can you ever pass through the empty place?

The next question concerns pages six and seven of the instruction booklet in which they give the following examples: take the lamp and the rope out of the barrel. Drop the short and the long swords. Take the money and run. Open all except the green bottle. Drink beer. Are all these examples or does the lamp, short and long swords, money, green bottle and beer exist in the adventure?

Stephen Flight,
Honley Rd,
London.

Missing a pirate

MY FRIEND owns a BBC and has had some difficulty playing Level 9's Colossal Adventure. Could anyone tell us how to pass the oriental dragon and where the pirate hides?

Malcolm Bennie,
Fraser Gardens,
Kirkintilloch,
Glasgow.

Comparing programs

I'M WRITING this letter while playing Velnor's Lair. I'm just reloading my saved game having been killed again. I can heartily recommend this adventure.

Which is more than I can say for the Hobbit. I've spent my hard-earned cash on this program. The blurb says that the adventure follows the book very closely, but I find that it doesn't. I've only got as far as the trolls and I can't say "Don't eat me" or similar, as in the book. Consequently I get eaten. I know I've got to get the key and wait for dawn, but how? I'm going mad on this one.

I thoroughly enjoyed Fausts Folly. I think it is one of the best adventures for the Spectrum available, but has not had the publicity it deserves.

It is far and away better than Planet of Death from Artic. My wife completed Planet very easily and it was our first adventure.

But back to Velnor, which has just killed me again. One bug that I have found is that the program crashes sometimes when deleting input spelling mistakes and when scrolling. When this happens RUN doesn't work but GOTO 5 will take you to the beginning again.

I've got lots of tips for this program but being quite new to it I'll keep an eye on other peoples' progress through Tony Bridge's column.

I wouldn't mind writing to a Spectrum adventurer to exchange ideas and information. Perhaps we could get a national mail helpline going.

Another frustrating adventure is in the book *Over the Spectrum*. Unless I've typed it in wrong it's very hard. I've hardly progressed at all finding a locked door, a kitchen, a table, booze and an endless desert. Any tips would be gratefully received.

I'll wind up with a few ideas for adventures. I can't program well but should someone have a go at Michael Moorcock's *Warhound and World's Pain* or *Warrior of Mars* I'd be more than interested.

Tony Close,
Congleton,
Cheshire.

A D&D game control

I HAVE written a D & D game control program which runs on a Sharp MZ 80K computer.

This program relieves the DM of the routine "book-keeping" chores of a Basic D & D adventure. It handles all aspects of combat (missile and melee), wandering monster production, routine tasks (listening at, opening doors etc.), as well as subsidiary dice throwing and character sheet production.

The program still allows the DM to fudge results to suit his party and is not a strict controller of the game as are other game control programs.

The program runs in 30K and is written so that it can be translated to other machines with the minimum of effort.

Brian Johnson,
Highfield Road,
Saxilby, Lincoln.



If you think you've something newsworthy, call 01-437 4343 and let us know

Urban nightmare introduced to imagination series

NEW ADVENTURES in store for the New Year include Richard Shepherd's Urban Upstart, from the Adventures into Imagination series.

Written for the Spectrum by Peter Cooke, the author of Invincible Island, the program challenges the player to escape from a nightmare 1980s town.

In Scarthorpe a resident's every action is under scrutiny. You can be jailed for littering.

The game begins in a house where you plot your escape. And if you are not astute enough, you could end up where you started from, or almost.

If you're jailed for some minor offence, or caught in the rain without an umbrella, catch pneumonia and go to hospital, your efforts to escape have come to naught. You start again.

Some of the 90 locations include a fish and chip shop, where there is a red herring on the counter, a book shop, where you can find out valuable information, and a cash dispenser for money.

No help program has been supplied with Urban Upstart as there was with Invincible Island.

Designed to take some pressure off the company and to provide players with hints to the game, Richard Shepherd found that the help program increased the customers' confusion.

"This time we'll supply help sheets to those who write to us asking for information," he said.

Microdrive option available

ADVENTURE game software producers Richard Shepherd has released a cash controller program with a save-to-ZX microdrive option in the main menu.

The microdrive allows the user to save the program onto a blank microdrive cartridge.

Using the ZX microdrive, the cash controller can be loaded in 90 seconds on the Spectrum 48K.

Cash Controller with ZX microdrive costs £9.95.

Board game firm on road to recovery

THE company founded to market Dungeons and Dragons, TSR Hobbies Inc, is looking at methods of improving its poor finances.

After high profits in the 1983 fiscal year the company has experienced growing pains. Management was forced to write off one company and lay off workers just after a recruitment drive.

They also experienced production problems and failed with a diversification project which included a move into computer software.

A new team of managers has been hired to smooth out the problems.

With a coherent system of planning the managers will divide TSR into four.

In the new system, TSR Inc will publish games and books, TSR Ventures Inc will supervise trademark licensing, TSR Worldwide will manage international sales and Dungeons and Dragons Entertainment Corporation will produce cartoons.

The managers believe that the new system will ensure that one venture's failure won't handicap other operations.

Win wars the strategic way

WAR STRATEGY features in two recent releases from Lothlorien, Dreadnaught and Confrontation.

Dreadnaught is a naval war game set in 1914. The British fleet confronts the Germans, who are about to launch an attack on Britain.

The game is designed for two players who choose their sides and the victory criteria. The computer acts as referee.

After deciding how many ships are to be lost before a victory is declared, the players call up their security information.

Here they are told what their strength is, the size of the fleet and their quantity of ammunition. But neither opponent knows how strong his enemy is.

Using the security information the players give battle instructions to their ships.

The player can see his own ships and a few (if any) of the enemy's ships that may appear on the screen.

Dreadnaught is available for the Spectrum 48K.

In Confrontation, a modern tactical warfare master program, the players get to choose their own battleground setting.

Whether you want to fight in Vietnam, the Middle East or Europe you merely load in the master program to create any modern war scenario of your choice.

The player can copy a real war scenario, for example the Battle of Alamein, into the computer using Confrontation's facility to position mountains, hills or airfields to recreate the battle scene.

With the master program the player receives a game of a modern European war scenario that can be played immediately.

Confrontation is available for the Spectrum and, by the middle of this month, the BBC.

Lothlorien also have on the market a tactical aerial combat game for the Spectrum 48K.

Called Red Baron, the player, from the cockpit of his World War I Sopwith Camel, fights two ace enemy pilots.

You must control your altitude, the direction in which you move and other variables in order to attack enemy planes and avoid their fire.

If your strength holds out, and your plane is not too badly damaged, you may get through all the 19 levels of difficulty.

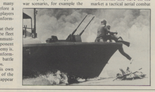
Failing this you can go back to the beginning of the game where a friendly pilot gives you some hints on strategy.

Stolen Lamp is Lothlorien's only adventure out of the new batch of releases.

A text/graphic game for the BBC it joins the spirit of Tales of the Arabian Nights.

The hero or heroine must retrieve a magic lamp.

The main mode of transport is a magic carpet and you meet an assortment of people including an enchanteress.



Twin Kingdom cassette features 175 locations

FULL-SCREEN pictures for 175 locations is one of the features of Twin Kingdom Valley from Bug-Byte Software.

In their new adventure, based on a dragons and dungeons theme, you must beware of tricks, wandering monsters, dwindling strength and search for keys that might help you open closed doors in order to complete the quest.

A valley king asks the player, under the guise of a wandering adventurer, to retrieve a treasure chest from a rival kingdom.

In his travels the adventurer meets various nasties including the castle guards, sand lurkers, trolls, a dragon and a witch. There is also a giant to fight and some mischievous elves who might be persuaded to provide you with weapons in return for certain favours.

A spokesman for Bug-Byte Software said some of the characters had minds of their own. Elves and guards would clash but could become valuable friends for the player.

And like Valhalla, the game plays by itself when the adventurers are slow issuing commands.

Novice masters program writing

SUE GAZZARD went from adventure novice to master when, within three months of buying her BBC, she began writing games for Level 9 Computing.

She began playing adventures in April last year when the BBC was bought. She enjoyed playing Level 9 games and whenever she got stumped would write to the company for clues.

"I've been known to stay up till two o'clock in the morning," Sue said. "I found adventures fired my imagination."

In August last year, after becoming known at Level 9 as an avid adventurer, Sue was asked to write a program for the company. Then a second, then a third.

She tried to use life-like situations in her games. "I use the library for research. So (in Lords of Time) a Roman village is based on a map of a real village and a Tudor house is a copy of a real house," Sue said.

Her first game, Lords of Time, was released at the *Your Computer* Christmas Fair in December. The sequel will be launched before Easter. And two months ago her third game was in the making.

Twig offers £10,000 in prizes

TWIG SYSTEMS Software in association with disc jockey and television personality Dave Lee Travis have organised a nation-wide competition with prize money totalling £10,000.

The competition, Monster Challenge, will accompany the launching of a new range of "mind-bending" software from Twig, who tag the programs a new generation of computer games.

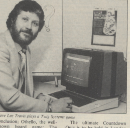
Twig say that the collection of six games are oriented towards the intellect, reasoning powers and keyboard dexterity.

Dave Lee Travis, a computer and video buff of long standing, says that the games will have people beating their heads on the floor in frustration.

"I've been messing about with computer puzzles for years and I like to think I'm pretty good", he said, "so I speak as something of an authority when I say that these new games will take a lot of solving."

Whoever wanted to win the £10,000 Monster Challenge prize should be prepared to earn it.

The collection comprises Air Sea Missile, which will appeal to the video champs; Cambridge, involving a trip round the city directed by a series of clues which may appeal to those with university degrees; Take the Strain, which requires the player to learn how correctly to disembark from a train before he even proceeds to the final conclusion; Othello, the well-known board game; The Tower, a gruelling visit to that well-known penal institution; and Countdown Quiz for those who aspire to the ultimate challenge — the £10,000.



Dave Lee Travis plays a Twig Systems game

Twig computer games are currently compatible with BBC, Dragon and Sinclair micros and the scope is being broadened to encompass other currently popular systems.

The games are available on mail order from Twig's headquarters at 6 High Street, Wendover, Bucks.

Full instructions for participating in DLT's Monster Challenge are included with each of the games. Each purchaser becomes a registered competitor.

The ultimate Countdown Quiz is to be held in London when 10 competitors have solved the build-up games of the series and it is proposed to televise the final. The games may be attempted in any order of preference.

Dave Lee Travis said: "We know the games are difficult — we just don't know quite how difficult. So we don't know how long it will take individuals to solve them or how long it will take us to get 10 finalists together.

"But the prize isn't static — the longer it takes for 10 winners to emerge the bigger the cash prize will become. And if our plans for the final pan out, that will be real Monster fun all on its own."

Computer mail game starts on Prestel

THE FIRST computer-moderated game to be played on Prestel will begin this month.

It is Starnet from Mike Singleton, the writer of the first British play-by-mail game, Starlord.

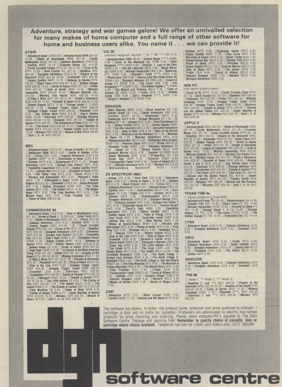
Playing on Prestel means that micro owners need wait only minutes for replies rather than weeks.

Starnet has been written on massive proportions with the three-dimensional map taking up 343 Prestel pages.

According to Mike it is similar in aim to Starlord, with the task being to capture a throne ship.

"As in Starlord there are different types of stars with different properties, but Starnet has been adjusted to fit in with the new system," Mike said.

The main difference between the programs would be in the map of the galaxy. In Starlord it was a standard disc shape with a definite centre, while the map in Starnet was a three-dimensional cube. □



Adventure, strategy and war games galore! We offer an unrivalled selection for many makes of home computer and a full range of other software for home and business users alike. You name it . . . we can provide it!

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Imagination's the only limit

*Gilsoft has developed a program that turns novices into adventure designers — **Tony Bridge** reports*

IN THE PAST few weeks a couple of programs have appeared (Hurg from Melbourne House and Games Designer from Quicksilva) which will allow the budding arcade game designer to create his own Zaxxon.

From Gilsoft comes the adventurer's equivalent, The Quill. It is an adventure system for the 48K Spectrum. Written by G Y The Quill is an interpreter program to compile your own adventures.

The tape is accompanied by a 52-page manual which explains things in great detail, and rewards a close reading.

A sample

On LOADing, an 18-point menu is presented, then you open the manual. After a page of introduction: what is adventure? and a page of 'getting started', or how to LOAD the program, the user is given a quick tour of the menu.

Pressing O, for instance, informs us how many bytes are to spare. At the start there is some data in the program, so we have 30,553 bytes free.

A sample mini-adventure is then presented which eases us gently into the creation process. A six-location map is shown, with the objects present, and the routes between the locations. Following the example adventure will give you practice in using The Quill.

To write your own adventure you must first of all map out the locations and decide what objects you will initially leave lying around. Then work out how the player can move from one location to the other. In the manual's example map the player will start in the hall where there is a hat and a coat.

From here the player may proceed west into the bedroom, east to the kitchen, south to the lounge or down to the dark cellar and the dining room. The sixth location may be reached from the lounge and the kitchen.

Now to set it all up: Pressing C, at the main menu gives us our location text menu, from which we may choose to (I)nsert a text, (A)mend a text, or PRINT (to the screen) or LPRINT (to the printer) a text.

Start by printing a text to the screen and you'll see all the locations so far defined, along with their descriptions as written by you. In the database included in The Quill, is the first location, O. The description demonstrates all the modes that may be used in your own descriptions, such as BRIGHT, FLASH, INVERSE and so on. If you wish, and to get a bit of practice, you may CLEAR the description of this location by pressing CAPS SHIFT AND '1' together. The text may then be amended to your heart's content, and of course changed completely.

Descriptions of other locations may be inserted in the database, and amended as necessary. Once all this is satisfactorily accomplished we can go on to the movements routine. Press 'D' on the main menu and another sub-menu, much like that for the location routine is presented. (P)rinting the movement table at this point shows us that, in fact, there are no movements recorded at present. Back to the mini-menu, and then press (A)mend. There is (I)nset here; creating a location automatically inserts a null entry for that location in the movement table, so the user can only amend it.

From location O, the hall, we have decided that we want the adventurer to go east to one. The kitchen down to five, the celler and so on. Note that locations must be created before attempting to make movement links between them. Once the movement table has been completed, the table may be printed or LPRINTed for inspection.

Dining room

Now the adventure may be tested to ensure that it works, insofar as it exists. Select (L) from the main menu and the program will ask if you require diagnostics. Forget this for the moment. This option will only be required later when a lot more data is present.

On refusing this option you'll see the first location appear on-screen and the statement: Tell me what to do. There's nothing clever you can instruct the computer to do at this stage (after all, you've typed in nothing more than the basics) so type S, or south, and you'll find yourself in the lounge. This is as it should be. Type W or west and the reply will be, "I can't go in that direction". Type E and you'll arrive at the dining room.

Assuming that you've typed everything in correctly you will be moving around the locations in the way you want. Anything else will elicit the reply "I don't understand". (R), however, will redescribe the location and (I) will give you an inventory of objects carried (nothing so far!). Note that, as the program is written in machine code, the responses are just about instantaneous.

To make the adventure more interesting scatter a few objects around. The above procedure is followed here: select (E) from the main menu and a mini-menu is presented from which you may decide to (P)rint, or (L)PRINT the list of objects so far present in the adventure. (I)nsert or (A)mend the object text. (P)rinting will show that the database already contains "a source of light", which will be found at location O.

Insert the rest of the objects using the map in the manual as a guide. You'll find, for instance, a torch, the source of light, a sharp knife and an apple. Some may be carried, while others are not created, that is, not immediately visible until a certain condition is met, such as opening the safe.

30 words

Careful working out is needed in order to cover all possibilities but the manual makes things very clear. For instance, the act of opening the safe creates the jewel and destroys the closed safe.

If the player then takes the jewel, the jewel ceases to exist as an object and becomes a carried object, which is treated differently. And so it goes on. Each and every object and location must be thoroughly initialised through the menu.

The vocabulary menu for The Quill already contains more than 30 words, such as up, down, east, north, take and wear. These should be sufficient for much of your adventure.

The vocabulary also allows you to inspect the synonyms of all these words. Ascend will also yield U, up, clim(b), as well as asce(nd). North is recognised by N and nort(h) for as long as you want.

Asking for (G) in the main menu will put us in the event menu. From here we may see all the actions that the program will take to respond to the player's input. The word values input by the player will be matched against each entry in the event table and the appropriate action taken. I, or INVENT (for inventory), is answered by "I have with me: . . .".

And so the adventure is constructed building it up from our initial framework and adding and amending as necessary. To start with, we'll be working on the mini-adventure presented in the manual, which is good practice for writing our own.

Detailed look

The 29 pages of the manual are taken up with the set-up of the adventure. It includes all the actions such as quit, save (present game), load (previous game), and so on. All these words may be specified to your own taste. The remainder of the bulky manual contains a more detailed look at the adventure editor.

After entering the data as indicated you'll have written a full-blown machine-code adventure. In summary all you have to do is draw out the map of your adventure. Decide what text will describe ▷

Bedroom with bed 4 — E

Hall 0 — W, E, D, S — Hat, Coat

Kitchen 1 — W, S — Torch

Dark Cellar 5 — U — Jewel in Safe

Lounge 3 — N, E — TV, Key

Dining Room 2 — N, W — Apple, Knife

A map of the adventure in which the objective is to find the jewel and place it in the dining room

◁ each location, what objects you want around, the exits from the location and if light is needed. Write in your own vocabulary and decide what conditions have to be met at each point.

A person without any programming experience can construct an adventure. Imagination is the only limiting factor. The Quill rates 10 out of 10 and will be an indispensible aid to any adventure writer.

The final good facet of The Quill is that Gilsoft asks to be mentioned somewhere in the finished adventure, which seems a small price to pay. Gilsoft seems to have no objection to the commercial sale of adventures constructed with The Quill.

I foresee many highly imaginative adventures coming onto the market in the future, from the quills of people who otherwise would not even contemplate the idea. At £14.95 the price seems rather high but it is worth every penny. The adventures created with the aid of the system, I think will be passed around the adventuring community at a very low cost.

To illustrate what can be done Gilsoft provides a copy of its own adventure, Diamond Trail, based on The Quill system. It takes the form of a traditional text adventure but I would expect somebody to create a more unusual scenario as they become familiar with the system. Imagination is the only limit.□

Map and explore fantasy land

In simple terms Lyman Alpha shows amateur adventure writers how to draw a map of their fantasy land

THE very first thing you have to do when writing an adventure game is to draw a map of your fantasy land.

A simple explanation of how to program an adventure map using PEEK, POKE, and BIT manipulation follows. Don't be alarmed, they are dead easy. But to start off with, a story about Startrek.

In the old days of mainframe computing, just a few years ago, the only decent game you could play was Startrek. It was often written rather inefficiently, mainly because most computers have quite a large amount of memory.

The familiar scenario, "You are in a galaxy divided into a 8 by 8 quadrant which is sub-divided INTO an 8 by 8 sector" means that you will need a dimensional array of 8 by 8 by 8 by 8 which is
DIM A(7,7,7,7)
since the BBC basic's DIM statement gives you a 0th element instead of starting from 1.

This is a very large array and occupies 20K since each array of the element needs 5 bytes, and will leave you with 8K to program the main Startrek game. A ludicrously small amount. What can we do? Well, we could use an integer array;
DIM A%(7,7,7,7)
which will take up 16K, still quite a hefty amount.
How about a byte array;
DIM A% 4096 ($8 \times 8 \times 8 \times 8 = 4096$)

The above byte array reserves 4096 memory spaces for all the locations in the galaxy. You can POKE 255 (which represent TRUE) in the memory location where the stars are and use PEEK to test if there is any star. You will need a function to work out the memory location as below.
DEF FNA(QX,QY,SX,SY) =
$512 \times QX + 64 \times QY + SX \times 8 + SY$
To poke: A%?(FNA(1,2,3,4)) = 255
To peek: X = A%?(FNA(1,2,3,4))

This method is quite memory efficient. It only uses 4K bytes which will leave you with plenty of memory to play around with. But you can do one better than a byte array. Bit map the galaxy! Okay, what is a BIT you might ask. Well each memory location, i.e. each BYTE is made up 8 Binary digits (8 BITs). A combination of 8 binary numbers (0 or 1) gives a number between 0 to 255 which is the range of numbers one byte can have.

Because the binary number system is a system using only 0 and 1 it can be taken as meaning 1 = TRUE and 0 = FALSE. Now since all you need to know for a particular location is whether there is a star there or not you can say that a location with a star is 1 and where there isn't 0.

Since 8 bits are in a byte you will ▷

```
 10REM ******************************************
 30REM MAP LOADER
 40REM
 50REM BY L.ALPHA
 60REM
 70REM THIS IS AN EXAMPLE PROGRAM WHICH YOU'LL HAVE
 80REM TO MODIFY TO SUIT YOUR ADVENTURE.
 90REM INPUT HIMEM=&6400 BEFORE YOU START
100REM LOADS THE MAP FROM &6400
110REM (HIMEM CAN BE CHANGED IF YOU WANT)
120REM
130REM ******************************************
140
150
160REM THIS ROUTINE IS FOR A 2D MAP
170REM IF YOU ARE USING A 3D MAP
180REM YOU DON'T NEED LINES
190REM 10 TO 370
200
210
220A=5 :REM CHANGE THIS VALUE TO THE LENGTH OF YOUR X DIRECTION
230B=5 :REM CHANGE THIS VALUE TO THE LENGTH OF YOUR Y DIRECTION
240
250
260FOR Y=1 TO B
270FOR X=1 TO A
280READ N$,S$,E$,W$
290CODE=-(1*(N$="N")+2*(S$="S")+4*(E$="E")+8*(W$="W"))
300?((Y-1)*A+X-1+&6400)=CODE
310NEXT X
320NEXT Y
330PRINT"LOADED"
340END
350
360
370REM ******************************************
380
390
400REM THIS ROUTINE IS FOR A 3D MAP
410REM IF YOU ARE USING A 2D MAP
420REM YOU DON'T NEED LINES
430REM 370 TO 630
440
450
460A=5 :REM CHANGE THIS VALUE TO THE LENGTH OF YOUR X DIRECTION
470B=5 :REM CHANGE THIS VALUE TO THE LENGTH OF YOUR Y DIRECTION
480C=5 :REM CHANGE THIS VALUE TO THE LENGTH OF YOUR Z DIRECTION
490
500
510FOR Z=1 TO C
520FOR Y=1 TO B
530FOR X=1 TO A
540READ N$,S$,E$,W$,U$,D$
550CODE=-(1*(N$="N")+2*(S$="S")+4*(E$="E")+8*(W$="W")+16*(U$="U")+32*(D$="D")
560?((Z-1)*A*B+(Y-1)*A+X-1+&6400)=CODE
```

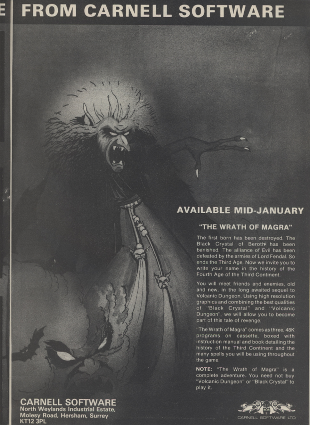
MEMORY LOCATION		Bit 8	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	The number each byte holds
One byte { n+7	8	0	0	0	0	0	0	1	0	2
n+6	7	0	0	0	0	0	0	0	0	0
n+5	6	0	1	0	1	0	0	0	0	80
n+4	5	0	0	0	0	0	0	0	0	0
n+3	4	0	0	0	0	0	1	0	0	4
n+2	3	1	0	0	0	0	0	0	1	129
n+1	2	0	0	1	0	0	0	0	0	32
n	1	0	0	0	0	1	0	0	0	8
Sector Y direction		1	2	3	4	5	6	7	8	

Section X direction

1 = Star
0 = No Star

Diagram 1 — a quadrant of the Startrek galaxy using the Bit map technique


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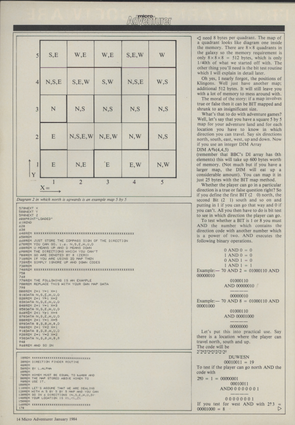


Diagram 2 in which north is upwards is an example map 5 by 5

```
570NEXT X
580NEXT Y
590NEXT Z
600PRINT"LOADED"
610END
620
630
640REM ****************************************
650REM
660REM JUST STORE THE COMPASS SIGN OF THE DIRECTION
670REM YOU CAN GO. i.e. N,S,E,W,U,D
680REM U MEANS UP AND D MEANS DOWN
690REM THE DIRECTIONS WHICH YOU CAN'T
700REM GO ARE DENOTED BY 0 (ZERO)
710REM IF YOU ARE USING 2D MAP THEN
720REM SIMPLY IGNORE UP AND DOWN CODES
730REM
740REM ****************************************
750
760
770REM THE FOLLOWING IS AN EXAMPLE
780REM REPLACE THIS WITH YOUR OWN MAP DATA
790
800REM Z=1 Y=1 X=1
810DATA N,S,E,W,U,D
820REM Z=1 Y=1 X=2
830DATA N,S,E,W,U,D
840REM Z=1 Y=1 X=3
850DATA N,S,E,W,U,D
860REM Z=1 Y=1 X=4
870DATA N,S,E,W,U,D
880REM Z=1 Y=1 X=5
890DATA 0,S,0,W,0,D
900REM Z=1 Y=2 X=1
910DATA 0,S,0,W,U,D
920REM Z=1 Y=2 X=2
930DATA N,S,0,W,0,0
940
960REM AND SO ON
```

```
10REM ****************************
30REM DIRECTION FINDER ROUTINE
40REM
50REM BY L.ALPHA
60REM
70REM HIMEM MUST BE EQUAL TO &6400 AND
80REM THE MAP STORED ABOVE HIMEM TO
90REM USE IT.
100REM
110REM LET'S ASSUME THAT WE ARE DEALING
120REM WITH A 5 BY 5 BY 5 MAP AND YOU CAN
130REM GO IN 6 DIRECTIONS (N,S,E,W,U,D)
140REM YOUR LOCATION IS X%,Y%,Z%
150REM
160REM ****************************
170
```

◁ need 8 bytes per quadrant. The map of a quadrant looks like diagram one inside the memory. There are 8×8 quadrants in the galaxy so the memory requirement is only 8×8×8 = 512 bytes, which is only 1/40th of what we started off with. The other thing you'll need is the bit test routine which I will explain in detail later.

Oh yes, I nearly forgot, the positions of Klingons. Well just have another map; additional 512 bytes. It will still leave you with a lot of memory to mess around with.

The moral of the story: if a map involves true or false then it can be BIT mapped and shrunk to an insignificant size.

What's that to do with adventure games? Well, let's say that you have a square 5 by 5 map for your adventure land and for each location you have to know in which direction you can travel. Say six directions north, south, east, west, up and down. Now if you use an integer DIM Array

DIM A%(4,4,5)

(remember that BBC's DI array has 0th elements) this will take up 600 bytes worth of memory. (Not much but if you have a larger map, the DIM will eat up a considerable amount). You can map it in just 25 bytes with the BIT map method.

Whether the player can go in a particular direction is a true or false question right? So if you define the first BIT (2 0) north, the second Bit (2 1) south and so on and putting in 1 if you can go that way and 0 if you can't. All you then have to do is bit test to see in which direction the player can go.

To test whether a BIT is 1 or 8 you must AND the number which contains the direction code with another number which is a power of two. AND executes the following binary operations.

0 AND 0 = 0
1 AND 0 = 0
0 AND 1 = 0
1 AND 1 = 1

Example:— 70 AND 2 = 01000110 AND 00000010

```
    01000110
AND 00000010
    --------
    00000010
```

Example:— 70 AND 8 = 01000110 AND 00001000

```
    01000110
AND 00001000
    --------
    00000000
```

Let's put this into practical use. Say there is a location where the player can travel north, south and up.

The code will be

$2^7 2^6 2^5 2^4 2^3 2^2 2^1 2^0$

```
  DUWESN
00010011 = 19
```

To test if the player can go north AND the code with

2↑0 = 1 = 00000001

```
    00010011
AND 00000001
    --------
    00000001
```

If you test for west AND with 2↑3 = 00001000 = 8 ▷

◁

```
  00010011
AND00001000
  --------
  00000000
```

In the general case:
(location code) AND 2 (direction code) if you can go that way and
(location code) AND 2 (direction code) = 0 when you cannot go that way.

This can be programmed in a IF-THEN-ELSE statement as follows: IF (A% AND 2↑B%) ( )0 THEN PRINT"OK. YOU MOVE THAT WAY" ELSE PRINT"YOU CAN'T GO THAT WAY"

The theory's over, let's put this into practice. First of all you need to draw a map. It can be two or three dimensional. For each location mark all the directions you can go as I have done in the diagram two. Now load in the appropriate portion of the MAP LOADER program. It contains all the necessary instructions and explanations in the REM statements, so it should be easy to understand. You must reserve memory space by inputting HIMEM=&6400 (or any other suitable address) because this program uses memory space above HIMEM to store the map rather than using a DIM statement. It is easier to SAVE the map. Add the map data to the program as instructed the RUN it. After that store the map using: ×SAVE"MAP" 6400 7C00

To use this map you'll need the direction finder procedure in your main adventure program. All you need is the basic four-line PROCDIRECTION procedure. □

```
180
190
200REM THE DIRECTIONS ARE CODED IN THE
210REM FOLLOWING MANNER
220REM NORTH=0
230REM SOUTH=1
240REM EAST =2
250REM WEST =3
260REM UP   =4
270REM DOWN =5
280
290
300REM ROUTINE TO INPUT THE DIRECTION YOU WANT TO GO
310REM YOU CAN CHANGE THIS BIT TO SUIT YOUR
320REM WORD RECOGNITION ROUTINE.
330
340
350INPUT"WHICH WAY DO YOU WANT TO GO ",W$
360W$=LEFT$(W$,1)
370IF W$="N" THEN P%=0
380IF W$="S" THEN P%=1
390IF W$="E" THEN P%=2
400IF W$="W" THEN P%=3
410IF W$="U" THEN P%=4
420IF W$="D" THEN P%=5
430PROCDIRECTION
440PRINT"YOU ARE AT LOCATION X=";X%;" Y=";Y%;" Z=";Z%
450END
460
470
480
490REM PROCDIRECTION IS THE IMPORTANT BIT YOU NEED
500REM ALL YOU HAVE TO DO IS TO SET P% TO THE
510REM DIRECTION CODE AND CALL IT.
520REM IT GETS THE DIRECTION CODE FOR YOUR PRESENT
530REM POSITION FROM THE MAP AND STORES IT INTO F%
540REM THE FORMULA FOR F% IS AS FOLLOWS
550REM F%=?("address of the start of the map"+
560REM    X%+Y%*"length of X-direction"+Z%*"length
570REM    of Y-direction"*"length of X-direction")
580REM THEN IF (F% AND 2^P%)<>0 TEST TO SEE
590REM IF YOU CAN GO THAT WAY AND MOVE YOU TO
600REM NEXT LOCATION. IF YOU CAN'T GO THAT WAY
610REM IT WILL TELL YOU SO.
620
630
640DEF PROCDIRECTION
650F%=?(&6400+X%+Y%*5+Z%*25)
660IF (F% AND 2^P%)<>0 THEN Y%=Y%+(P%=0)-(P%=1):X%=X%+(P%=2)-(P%=3):Z%=Z%+(P%=
4)-(P%=5) ELSE PRINT"YOU CAN'T GO THAT WAY"
670ENDPROC
680
690
700REM FOR A 2-D MAP MODIFY PROCDIRECTION THUS
710REM LINE 640 : DELETE Z%=25
720REM LINE 650 : DELETE :Z%=Z%+(P%=4)-(P%=5)
```

Conquering the stars by mail

A look at play-by-mail games past, present and future



Mike Singleton — "The players compete to gain control of the throne star"

EMPIRES ARE WON or lost in the space of an evening; light years pass in seconds; universes shrink, meet and are conquered in sitting rooms all over earth — technological change is about to transform the tame and relatively simple art of postal gaming beyond recognition.

Time between turns will be a matter of seconds rather than weeks and emperors will change crowns as frequently as computer games players buy software. It is possible that with the introduction of interactive cable tv coupled with satellite transmissions, players from Papua New Guinea to the United States will battle each other for the control of the universe without moving out of their sitting rooms. But back to the less complicated present.

The first play-by-mail game started in the UK with Diplomacy about 12 years ago, and the first computer-moderated PBM started in 1981 with Starlord, written by a former teacher from Liverpool, Mike Singleton.

It was a spin-off from a game played in the United States called Starweb, from Flying Buffalo. An Englishman called Chris Harvey learnt of the game and arranged to bring it to the UK. He acted as the posting centre. Players would send their moves onto Chris who would forward them on to Flying Buffalo where they were processed and returned to the UK.

After several years of playing and paying airmail rates Mike began Starlord. From a humble beginning with only five players in 1981, there are now 34 separate Starlord games running and more than 700 players — not just in the UK, but in Papua New Guinea, Canada, Australia and the US.

To play a PBM such as Starlord, which is designed so that new players can join at any time without disadvantage, you pay an entry fee of £1.25. For this you are given a rule book, the scenario and your first two turnsheets. The charge for subsequent turns is £1.25.

Your moves are fed into a computer. The game master then sends you a printout describing the consequences of that move, a map of the galaxy with various throne stars marked, the number of ships you have on each star, how many opponents are in your vicinity and the size of their forces.

Mike compares Starlord in aim to King of the Castle. "The players compete to gain control of the throne star and try to become emperor of the galaxy by battling either the present occupier or the computer." The emperor's turns are free for the duration of his reign. International players are given a four-week turnaround and in the UK there is a two-week turnaround.

Casting a net

In an innovative move that could change PBM games radically Mike has designed Starnet, a program to be played on Prestel. He hopes to begin its operation this month. It will be the first computer-moderated PBM to be played on a system such as Prestel in the UK. Similar versions have existed in the US for some time.

The UK version, however, enables micro owners to type in their commands and wait for replies. Everyone has access to the information at any one time. The US version is electronic mail, with the turns being loaded manually into the system, although sent in over the network. (One such game exists in Britain but is buried deep among the pages of Prestel making it difficult for potential players to find.)

With Starnet the moves will go directly into the system. There will be no human interaction apart from the players. "In this way the UK version is unique," Mike said. "A player will be able to call up maps of the universe which will be stored on various pages as long as he is a member of Prestel."

The game has been designed on massive proportions with the three dimensional map alone taking up 343 Prestel pages. Starnet is similar to Starlord in aim with the task being to capture a throne spaceship. "As in Starlord there are different types of stars with different properties, but Starnet has been adjusted to fit in with the new system," Mike said.

"The major difference will be the map of the galaxy. Starlord was a standard flat disc Shape with a definite centre. In Starnet the map is three D arranged as a cube, and has 343 different sections each with a map of its own. The player is able to move from sector to sector by going North, South, East, West, up or down."

Mike is confident that Starnet will attract the players needed to make the project practical. Six months ago he advertised the game and 200 people replied.

"It will be possible to have up to 500 players in one game," Mike said. "It hasn't yet been properly costed but it is expected to be close to 25 pence a turn, with faster turnarounds of perhaps a day when the system is running smoothly. At the beginning turnarounds will be once a week. When there are no bugs, twice," he said.

Atlantis is another conventional computer-moderated game Mike plans to launch this year. Using the same theme as Starlord, Atlantis will be a war game/fantasy adventure. "It has a similar objective to Starlord except that it is set in an underwater environment where the player attempts to become leader," he said.

Starlord has attracted a number of competitors and now there are about 12 PBM games in the UK. The designer of Vorcon Wars, J M Nicholson, was a former Starlord player. Described as an advanced strategy PBM game, Vorcon Wars is set on a planet in a distant solar system. The player must explore the land of Vorcon and develop partnerships in trade with the inhabitants.

The competition with other players for trade forces you to build forts and set mines to protect the wealth you have amassed. The ultimate aim is to gain control of the planet. You can use anything from spy satellites to nuclear weapons to ensure the annihilation of your enemy. Turns are two weeks apart and cost £1, but £1.50 will pay for a rule book, example sheets and the first three turns.

For £1.50 a turn Keys of Bled is a PBM simulation which allows its participants to adopt any role they choose on the archaic planet. As an explorer, conqueror, ruler or merchant you will have to consider factors such as morale, combat ability and leadership. The characters and setting a▷

◁ degree of flexibility so that players write the game as it develops.

Having chosen their roles, players adopt objectives, which if unsuccessful or tiresome may be changed to suit present needs. The task is to lead a tribe through a new world knowing only what the rules tell you. Information is gathered gradually through exploration and asking questions.

Settling the tribe

When the tribe settles it can choose any three of 12 activities if they have accumulated enough skills during the journey. The activities include herding, scouting, hunting, weaving and implement-making. Most are necessary for the tribe's survival. A scouting party sent out to explore a mysterious cave returns with gold or a quantity of copper: a good find for new settlers in a foreign land.

The popularity of PBM games has generated two commercially-produced magazines and 130 amateur no-profit fanzines. Enthusiasts produce these fanzines for each other covering the games they play. They provide hints and cover the history of the PBM — and sometimes are highly recommended reading. An example is *Interim* which accompanies Starlord.

More sophisticated than most fanzines, being professionally typeset, *Interim* is published quarterly. It contains articles from players on strategy, tactics, opinions, imperial reports and fiction. It sells for 25 pence an issue.

The two commercially-produced magazines in the UK are *PBM*, from Emjay Publications, and *Flagship*, from Nicky Palmer, a former editor of a general games magazine. Both titles were recently launched with their first editions appearing in October and November respectively.

PBM is published every second month. Edited by Mike Costello, who also publishes *The War Machine*, it aims to be a comprehensive guide to play-by-mail and modem gaming. Included are in-depth game profiles, reports on current games, articles on recent developments, coverage of non-commercial war games and role-playing and adventure programs.

Flagship is a quarterly publication, aiming at an international audience. It is professionally typeset, complete with a colour front cover. The magazine aims for the PBM player's greatest weaknesses with articles such as how to win at PBM — a discussion on tactics; Professional Secrets, which analyses popular games and suggests novel strategies; and a workshop section for games designers; and reviews.

Sophistication

With an increased enthusiasm for PBM and multi-player games the mediums on which they can be used are becoming more sophisticated. The scenario at the beginning may not occur for some time but the day when cable tv and modem gaming can be used is close.

According to Mike Costello, the introduction of interactive services will enable players to send information back and forth on the cable system. "Such networks are fully capable of handling multi-player games in which the participants are scattered all over the country but can communicate via terminals linked by cable," he said.

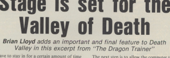
The main problem was in getting users to pay: "It is accepted that cable will not become profitable until it is linked to a satellite broadcast."

Problems

While modem gaming enables a quick turnaround, long-term problems have occurred in the US, with a rich player monopolising the game after six months. Because telephone cables are used, the number of turns you have depends on how high a Telecom bill you can afford. However with modems it is possible to play an entire game in one evening, while a game of diplomacy could take 1½ to two years to play using the Post Office.

But cable seems the most practical direction for interactive PBM gaming to go in the long term. And with the introduction of satellite transmissions, transcontinental multi-player games will be won and lost in an evening.□





Stage is set for the Valley of Death

***Brian Lloyd** adds an important and final feature to Death Valley in this excerpt from "The Dragon Trainer"*

OVER THE past two months we have built up an adventure program from scratch, and now have a valley that contains a footpath that weaves through it, several caves, a forest and a swamp. We also have a large selection of monsters, magical items, gems and spells.

But the valley still has one very important piece of architecture missing: the dark dungeons of Darganyon. Hidden somewhere in the depths of these dungeons is the key which you must find and take back to the palace to open a chest that contains a magic potion to cure your dying king.

This program has been written in Microsoft Extended Colour Basic as used on a variety of micros including the Dragon and the IBM PC. Listing one is responsible for drawing the dungeons and controlling everything that goes on inside them. Remember that where there is more than one space, a symbol has been inserted to make it easier for you to count how many spaces to type in.

Line 300 puts the dungeons into the valley. An inversed D represents them. Line 550 lets you enter the dungeon in the usual way (i.e. by moving onto the inverse D).

The screen is cleared and the top floor of the dungeon is drawn by lines 1510 to 1620. A few objects, represented by the stars, are scattered about the floor by lines 1640 to 1670 and the timer is reset by line 1680. You have to stay in for a certain amount of time before the door opens. Line 1700 tells you where you are. Lines 1710 to 1750 are copies of lines earlier on in the program.

Lines 1930 to 1950 decide which floor you are on and consequently send the computer to the correct one of the five floor-drawing routines from lines 1970-2280.

These lines are all PRINT statements and only draw each floor, so you can change the dungeons simply by changing these lines. You are asked whether you want to go up or down by lines 2460-2510. The stairs are represented by cyan blocks.

You may have noticed that one of the objects that you can find (lines 1850-1890) is a magic sword. This sword adds your strength to your energy when you are fighting, and for this reason we need line 2800 at the end of Listing One.

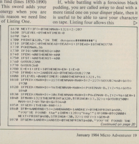
The next step is to allow the computer to acknowledge your success in bringing the key back to the palace. Listing two does this, and gives you a picture as a reward. I won't go into explanations of the graphics as it will take too long and will spoil the surprise at the end of the game (no RUNning this routine and peeking at the picture — that's cheating).

The Valley of Death is almost finished now, all that's left is to tidy up the loose ends and add a few useful routines.

The first of these is covered by listing three and is an inventory. This routine is called each time you press the I key and will tell you everything you have.

If, while battling with a ferocious black pudding, you are called away to deal with a more timid one on your dinner plate, then it is useful to be able to save your character on tape. Listing four allows this ▷

```
300 N=RND(288)+1024:IFPEEK(N)=96THENPOKEN,4:ELSE300
550 IFPEEK(MAN+D)=4THENQ=MAN:W=Z:GOTO1510
1510 FORN=0TO288STEP32:PRINT@N,STRING$(32,32);:NEXT
1520 PRINT@8,STRING$(16,191):PRINT@40,CHR$(191);"####";
    CHR$(191);" ";CHR$(191);"######";CHR$(223);CHR$(191)
1530 PRINT@72,CHR$(191);" ";CHR$(191);"####";CHR$(191);
    " ";CHR$(191);CHR$(191);CHR$(191);"###";CHR$(191)
1540 PRINT@104,CHR$(191);" ";FORN=0TO3:PRINTCHR$(191);:
    NEXT:PRINT" ";CHR$(191);"###";CHR$(191);" ";CHR$(191);
1550 PRINTCHR$(191);CHR$(191)
1560 PRINT@136,CHR$(191);" ";CHR$(191);" ";CHR$(191);"##";
    CHR$(191);CHR$(191);"##";CHR$(191);"###";CHR$(191)
1570 PRINT@168,CHR$(191);"###";CHR$(191);"###";CHR$(191);
    " ";CHR$(191);CHR$(191);" ";CHR$(191);" ";CHR$(191)
1580 PRINT@200,CHR$(191);" ";CHR$(191);" ";CHR$(191);CHR$
    (191);CHR$(191);" ";CHR$(191);CHR$(191);
1590 PRINTCHR$(191);"##";CHR$(191);" ";CHR$(191)
1600 PRINT@232,CHR$(191);" ";CHR$(191);" ";CHR$(191);" ";
    CHR$(191);" ";CHR$(191);"###";CHR$(191);CHR$(191);" ";
1610 PRINTCHR$(191):PRINT@264,CHR$(191);" ";CHR$(191);
    "###";CHR$(191);"###";STRING$(3,191);"##";CHR$(191)
1620 PRINT@296,CHR$(191);CHR$(207);STRING$(14,191)
1630 MAN=1321
1640 FORN=0TORND(4)+2
1650 IFO=1THENPOKEMAN,36
1660 X=RND(9)*32+RND(14)+1032:IFPEEK(X)=96THENPOKEX,106:
    ELSE1660
```



```
1670 NEXT:IFO=0THENMAN=1321:Z=207
1680 IFLEVEL=0THENTIMER=0
1690 TW=1
1700 PRINT@320,"IN THE dungeon########";
1710 IFDEAD<>0THENDEAD=DEAD+1:IFDEAD=18THEN3770
1720 POKEMAN,36
1730 IFIQ>400THENIQ=400
1740 IFEN>400THENEN=400
1750 IFST>400THENST=400
1760 GOSUB2300
1770 GOSUB360
1780 E=E+1:IFE=10THENEN=EN-1:E=0
1790 IFRND(4)=2ANDDEAD=0THENGOSUB2770
1800 IFLEVEL=0ANDTIMER>1000THENPOKE1321,96
1810 IFPEEK(MAN+D)=223THENMAN=MAN+D:Z=223:GOSUB2460:GOTO
    1930
1820 IFPEEK(MAN+D)=96THENMAN=MAN+D:POKEMAN-D,Z:Z=96:GOTO
    1840
1830 IFPEEK(MAN+D)=106THENMAN=MAN+D:POKEMAN-D,Z:Z=96:GEM=1
1840 IFMAN=1321THENPRINT@320,STRING$(17,32);:GOSUB1500:
    MAN=Q:Z=W:TW=0:GOTO440
1850 IFGEM=1THENR=RND(6)
1860 IFR=4ANDRND(5)=2ANDWAND=1ANDKEY=0THENPRINT@480,
    "YOU'VE FOUND the";CHR$(128);"key!";:FORN=0TO2000:
    NEXT:PRINT@480,STRING$(30,32);:KEY=1:GEM=0
1870 IFGEM=1ANDR=2ANDSD=0THENPRINT@480,"YOU'VE FOUND THE
```

Continued on page 20

Continued from page 19

```
     MAGIC SWORD!"::FORN=0TO2000:NEXT:PRINT@480,STRING$
     (31,32)::SD=1:GEM=0
1880 IFGEM=1ANDR=3THENPRINT@480,"YOU'VE FOUND A PRECIOUS
     STONE!"::FORN=0TO2000:NEXT:PRINT@480,STRING$(31,32)::
     TR=TR+RND(5)*100:GEM=0
1890 IFGEM=1THENPRINT@480,"YOU'VE FOUND A WORTHLESS
     STONE!"::FORN=0TO2000:NEXT:PRINT@480,STRING$(31,32)::
     GEM=0
1900 D=0
1910 GOTO1720
1930 IFLEVEL=0THENO=1:GOTO1510:ELSEIFLEVEL>0ANDLEVEL<6THEN
     ON LEVEL GOTO1970,2050,2120,2180,2240
1940 IFLEVEL<0THENLEVEL=0:GOTO1930
1950 IFLEVEL>5THENLEVEL=5:GOTO1930
1960 O=1:GOTO1640
1970 PRINT@41,"#####";CHR$(191);"#######";CHR$(223);CHR$
     (191):PRINT@73,"###";STRING$(8,191);" ";CHR$(191);" ";
     CHR$(191)
1980 PRINT@105," ";CHR$(191);"##";CHR$(191);"#######";CHR$
     (191);" ";CHR$(191):PRINT@137," ";CHR$(191);" ";CHR$
     (191);CHR$(191);"##";CHR$(191);"##";
1990 PRINTCHR$(191);" ";CHR$(191);" ";CHR$(191)
2000 PRINT@169," ";CHR$(191);" ";CHR$(191);"##";CHR$(191);
     CHR$(191);" ";CHR$(191);CHR$(191);"###";CHR$(191):
     PRINT@201," ";CHR$(191);"#####";CHR$(191);
2010 PRINT" ";CHR$(191);"##";CHR$(191);" ";CHR$(191)
2020 PRINT@233," ";STRING$(3,191);"##";STRING$(4,191);" ";
     CHR$(191);CHR$(191);" ";CHR$(191):PRINT@265,CHR$(223);
     "#######";CHR$(191);"###";CHR$(191);
2030 PRINT" ";CHR$(191):PRINT@296,STRING$(16,191);
2040 GOTO1960
2050 PRINT@41,STRING$(13,32);CHR$(223);CHR$(191):PRINT@73,
     "###";STRING$(8,191);" ";CHR$(191);" ";CHR$(191)
2060 PRINT@105," ";CHR$(191);" ";CHR$(191);CHR$(191);
     "#########";CHR$(191):PRINT@137," ";CHR$(191);"##";
     CHR$(191);"#####";CHR$(191);" ";CHR$(191);
2070 PRINT" ";CHR$(191)
2080 PRINT@169," ";CHR$(191);"##";CHR$(191);" ";STRING$
     (7,191);" ";CHR$(191):PRINT@201," ";CHR$(191);
     "##########";CHR$(191);" ";CHR$(191)
2090 PRINT@233," ";CHR$(191);CHR$(191);CHR$(191);" ";
     STRING$(5,191);" ";CHR$(191);CHR$(191);" ";CHR$(191):
     PRINT@265,CHR$(223);"#######";CHR$(191);
2100 PRINT"#####";CHR$(191)
2110 GOTO1960
2120 PRINT@41,"###";CHR$(191);"###";STRING$(4,191);"##";
     CHR$(223);CHR$(191):PRINT@73,"#####";CHR$(191);
     "######";CHR$(191);" ";CHR$(191)
2130 PRINT@105," ";STRING$(9,191);" ";CHR$(191);CHR$(191);
     " ";CHR$(191):PRINT@137,STRING$(14,32);CHR$(191):
     PRINT@169,STRING$(5,191);" ";CHR$(191);" ";
2140 PRINTCHR$(191);CHR$(191);" ";CHR$(191);CHR$(191);" ";
     CHR$(191)
2150 PRINT@201,CHR$(191);"##";CHR$(191);"##";CHR$(191);
     " ";CHR$(191);"###";CHR$(191);" ";CHR$(191):PRINT@233,
     "#####";CHR$(191);CHR$(191);" ";
2160 PRINTSTRING$(3,191);" ";CHR$(191);" ";CHR$(191)
2170 PRINT@265,CHR$(223);"##";STRING$(4,191);"##";CHR$
     (191);"####";CHR$(191):GOTO1960
2180 PRINT@41,"########";CHR$(191);" ";CHR$(191);"##";CHR$
     (223);CHR$(191):PRINT@73," ";STRING$(4,191);" ";
     STRING$(3,191);" ";CHR$(191);CHR$(191);"##";
2190 PRINTCHR$(191):PRINT@105,STRING$(11,32);CHR$(191);
     "##";CHR$(191):PRINT@137," ";STRING$(9,191);" ";CHR$
     (191);CHR$(191);" ";CHR$(191)
2200 PRINT@169," ";CHR$(191);" ";CHR$(191);STRING$(10,32);
     CHR$(191):PRINT@201,CHR$(191);CHR$(191);" ";CHR$(191);
     " ";CHR$(191);" ";STRING$(4,191);
2210 PRINT"##";CHR$(191);CHR$(191)
2220 PRINT@233,"#####";CHR$(191);"####";CHR$(191);CHR$
     (191);" ";CHR$(191);CHR$(191):PRINT@265,CHR$(223);CHR$
     (191);" ";STRING$(6,191);"#####";CHR$(191)
2230 GOTO1960
2240 PRINT@41,"####";CHR$(191);" ";CHR$(191);"######";CHR$
     (223);CHR$(191):PRINT@73," ";STRING$(4,191);"###";CHR$
     (191);" ";CHR$(191);" ";STRING$(3,191)
2250 PRINT@105,"##";CHR$(191);"###";CHR$(191);" ";STRING$
     (3,191);" ";STRING$(3,191):PRINT@137,"####";CHR$(191);
     " ";CHR$(191);"#####";STRING$(3,191)
2260 PRINT@169,STRING$(3,191);" ";STRING$(7,191);"###";
     CHR$(191):PRINT@201,"######";CHR$(191);"###";STRING$
     (3,191);" ";CHR$(191)
2270 PRINT@233,"##";STRING$(3,191);" ";CHR$(191);" ";CHR$
     (191);" ";CHR$(191);" ";CHR$(191);" ";CHR$(191);
2280 PRINT@265,CHR$(223);" ";CHR$(191);"#####";CHR$(191);
     "#####";CHR$(191):GOTO1960
2290 RETURN
2460 PRINT@320,"UP OR DOWN?";
2470 A$=INKEY$:IFA$=""THEN2470
2480 IFA$="D"THENLEVEL=LEVEL+1:GOTO2510
2490 IFA$="U"THENLEVEL=LEVEL-1:GOTO2510
2500 GOTO 2470
2510 PRINT@320,"###########";:RETURN
2810 IFSD=1THENHIT=HITS+RND(ST)

Listing Two
 770 D=0
 780 IFPL=1ANDKEY=1THEN3370
3370 CLS:PRINT"WELL DONE! YOU'VE SUCCEEDED!";:PRINT"THE
     KING IS SAVED!!!":PRINT"AND YOU MANAGED TO RETURN
     WITH:-":PRINT"the";CHR$(128);"key"
3380 PRINT"THE MAGIC WAND":IFMEDALLION=1THENPRINT"THE
     MEDALLION OF LIFE"
3390 IFSHIELD=1THENPRINT"THE MAGIC SHIELD"
3400 IFAMULET=1THENPRINT"THE AMULET OF THE GODS"
3410 IFSD=1THENPRINT"THE MAGIC SWORD"
3420 FORN=1TO20:IFPOTION(N)>0THEN3440
3430 NEXT:GOTO3450
3440 PRINT"AND SOME POTIONS!"
3450 PMODE3,1:PRINT:PCLS:GOSUB3790:PMODE3,1:SCREEN1,0:
     FORN=0TO2000:NEXT:GOTO4190
3790 DRAW"BM10,180:C4:R190U90L190D90R190E45U90G45"
3800 IFZZ=0THENCIRCLE(38,80),30,4,1.48,.46,.8
3810 IFZZ=0THENCIRCLE(226,80),30,4,1.48,.46,.85
3820 IFZZ=0THENLINE(40,38)-(230,38),PSET
3830 LINE(92,90)-(120,110),PSET,B
3840 PAINT(92,92),2,4
3850 COLOR3
3860 LINE(104,92)-(108,108),PSET,BF:CIRCLE(106,98),7
3870 PAINT(20,170),2,4:PAINT(220,80),2,4:IFZZ=0THENPAINT
     (210,70),2,4:PAINT(40,80),2,4
3880 COLOR4
3890 N=30
3900 FORM=160TO176STEP4:LINE(N,M)-(210-N,M),PSET:N=N-4:
     NEXT
3910 M=20
3920 FORN=14TO30STEP4:LINE(N,M+95)-(N,195-M),PSET:M=M+4:
     NEXT
3930 N=30:FORM=130TO114STEP-4:LINE(N,M)-(210-N,M),PSET:
     N=N-4:NEXT
3940 M=20:FORN=196TO180STEP-4:LINE(N,M+95)-(N,195-M),PSET:
     M=M+4:NEXT
3950 LINE(14,92)-(36,112),PSET,BF:COLOR3:LINE(40,92)-
     (60,112),PSET,BF:COLOR1:LINE(64,92)-(84,112),PSET,BF
3960 LINE(128,92)-(148,112),PSET,BF:COLOR3:LINE(152,92)-
     (172,112),PSET,BF:COLOR4:LINE(176,92)-(196,112),PSET,
     BF
3970 PAINT(34,134),3,4:PAINT(28,136),4,4:PAINT(24,136),1,
     4:PAINT(16,136),4,4
3980 IFZZ=1THEN4030
3990 FORN=38TO220STEP9:CIRCLE(N,80),30,4,1.48,.46,.8:NEXT
4000 FORN=40TO218STEP36:PAINT(N,75),4,4:NEXT
4010 FORN=20TO180STEP36:PAINT(N,75),3,4:NEXT
4020 FORN=34TO180STEP36:PAINT(N,75),1,4:NEXT
4030 COLOR2:LINE(12,91)-(198,91),PSET
4040 COLOR4:LINE(92,90)-(120,110),PSET,B
4050 IFZZ=0THENCOLOR1:LINE(38,37)-(230,37),PSET:LINE
     (38,36)-(230,36),PSET
4060 DRAW"BM208,158:C4:E27U64G27D64":PAINT(220,130),3,4
4070 IFZZ=0THENZZ=1:RETURN
4080 COLOR4
4090 DRAW"BM10,90:C4:E45R190L190D44"
4100 DRAW"BM10,90:C4:E85S40R190E10G10"
4110 DRAW"BM10,90:C4:E85R190"
```

Continued on page 22

◁ at any time simply by pressing the KEY (except while fighting). It opens a file to the tape, gives the file your character's name and then stores all the relevant variables on tape.

Unfortunately, or fortunately depending on where your character is, when you load your character back he will start at the palace, however, he will still have all his possessions (except the key if he had it — that would make things too easy).

Having saved your character you can load him back with the help of listing five. This allows you to load a character at the start of a game (by typing L) or to start a new game (by typing R).

The next thing is to give the character an ego. This routine gives you an idea of how well you are doing, and may be called at any time simply by pressing E (unless you are fighting, of course). Listing six handles this feature. This routine works by simply seeing how high your experience is and giving you a rating accordingly. There is also incorporated a routine which increases your strength, IQ and energy after every 500 experience points.

The Valley of Death is now finished — unless of course you want to add anything in which case you will probably need to compress some lines as the program is rather long. Hopefully this program has given you an idea of how to go about writing your own adventure programs, and will give you some enjoyment as you battle your way through the valley to save your king's life.

If any of you find that the program is too long to type in then I would be pleased to send you a copy of The Valley of Death on tape for £3.00 including postage and packing. You should write to Brian Lloyd, 9 Hornbeam Walk, Witham, Essex CM8 2SZ.

Each of the three parts of this series of articles can be used on its own, but works better as a whole. Send a stamped addressed envelope to Valley of Death, Micro Adventurer, 12-13 Little Newport St, London WC2R 3LD, for photocopies of the two preceding articles. □



Continued from page 20

```
4120 DRAW"BM200,90;C4;E45R2D1R4D1R2U1R2U1R2"
4130 PAINT(25,80),2,4:PAINT(60,80),2,4:PAINT(90,90),2,4:
     PAINT(246,44),2,4
4140 CIRCLE(125,125),500,3
4150 CIRCLE(150,90),15,4,1,.5,0:PAINT(152,85),3,4:CIRCLE
     (150,90),15,3,1,.5,0
4160 COLOR3:LINE(146,85)-(154,70),PSET,BF:COLOR1:LINE
     (146,69)-(154,64),PSET,BF
4170 PMODE3,1:SCREEN1,0
4180 GOTO4180
4190 CLS0:PRINT@227,"THE CHEST WILL BE OPENED IN A";:
     PRINT@269,"MOMENT";:PCLS:GOTO3790
```

Listing Three

```
2400 IFA$="I"THENGOSUB3460
3460 FORN=320TO448STEP32:PRINT@N," ":NEXT:PRINT@480,
     STRING$(30,32);:PRINT@320,"";
3470 IFWAND=1THENPRINT"WAND"
3480 IFSD=1THENPRINT"SWORD"
3490 IFMEDALLION=1THENPRINT"MEDALLION"
3500 IFAMULET=1THENPRINT"AMULET"
3510 IFSHIELD=1THENPRINT"SHIELD"
3520 IFKEY=1THENPRINT"the";CHR$(128);"key";
3530 FORN=0TO20:IFPOTION(N)>0THEN3550
3540 NEXT:GOTO3570
3550 FORN=0TO3000:NEXT:FORN=320TO448STEP32:PRINT@N," ":
     NEXT:PRINT@480,STRING$(30,32);:M=0:FORN=0TO20:IF
     POTION(N)>0THENM=M+1:NEXT:ELSENEXT
3560 PRINT@320,M;"POTIONS":M=0
3570 IFAMULET=0ANDSD=0ANDKEY=0ANDMEDALLION=0ANDSHIELD=0AND
     WAND=0THENPRINT"NOTHING!"
3580 FORN=0TO3000:NEXT:FORN=320TO448STEP32:PRINT@N," ":
     NEXT:PRINT@480,STRING$(30,32);:GOSUB360:RETURN
```

Listing Four

```
3590 CLS:PRINT"IS THE TAPE READY?"
3600 A$=INKEY$:IFA$<>"Y"THEN3600
3610 PRINT"PRESS play AND record ON TAPE":FORN=0TO3000:
     NEXT
3620 PRINT"SAVING ";NAME$;" THE ";CLASS$
3630 OPEN"O",-1,NAME$
3640 PRINT#-1,CLASS$;ST;IQ;EN;ST;EX;ME;SD;WA;SH;AM;
3650 FORN=0TO20:PRINT#-1,POTION(N);:NEXT
3660 CLOSE#-1
3670 PRINTNAME$;" THE ";CLASS$;" SAVED"
3680 END
```

Listing Five

```
  40 INPUT"LOAD CHARACTER OR rESTART";A$
  50 IFA$="L"THEN3690
  60 IFA$<>"R"THEN40
3690 CLS:INPUT"CHARACTER'S NAME";NAME$
3700 PRINT"PRESS play ON TAPE":FORN=0TO3000:NEXT
3710 OPEN"I",-1,NAME$
3720 INPUT#-1,CLASS$,ST,IQ,EN,ST,EX,ME,SD,WA,SH,AM:FORN=
     0TO20
3730 IFEOF(-1)THEN3760
3740 INPUT#-1,POTION(N):NEXT
3750 CLOSE#-1
3760 GOTO190
```

Listing Six

```
  10 DIME(200):FORN=1TO200:E(N)=N*500:NEXT:G=1:CLS
 450 IFEX>E(G)THENG=G+1:EN=EN+RND(5)*5:IQ=IQ+RND(5)*5:
     ST=ST+RND(5)*5
2440 IFA$="E"THENGOSUB4290
4290 FORN=320TO448STEP32:PRINT@N,"":NEXT
4300 PRINT@480,STRING$(30,32);
4310 PRINT@320,"";
4320 IFEX<500THENPRINT"FISH FOOD":GOTO4580
4330 IFEX<1000THENPRINT"SWORD PRACTICE DUMMY":GOTO4580
4340 IFEX<2000THENPRINT"APPRENTICE FOOL":GOTO4580
4350 IFEX<3000THENPRINT"SNAIL SLAYER":GOTO4580
4360 IFEX<4000THENPRINT"DRAGON'S TOY":GOTO4580
4370 IFEX<5000THENPRINT"APPRENTICE SWORDSMAN":GOTO4580
4380 IFEX<6000THENPRINT"WOLF MASTER":GOTO4580
4390 IFEX<7000THENPRINT"SWORDSMAN":GOTO4580
4400 IFEX<8000THENPRINT"LION TAMER":GOTO4580
4410 IFEX<9000THENPRINT"3RD RATE HERO":GOTO4580
4420 IFEX<11000THENPRINT"MASTER OF THE SWORD":GOTO4580
4430 IFEX<12000THENPRINT"2ND RATE HERO":GOTO4580
4440 IFEX<13000THENPRINT"LORD OF THE PATH":GOTO4580
4450 IFEX<14000THENPRINT"LORD OF THE KEEP":GOTO4580
4460 IFEX<16000THENPRINT"GOBLIN SLAYER":GOTO4580
4470 IFEX<18000THENPRINT"CHAMPION":GOTO4580
4480 IFEX<22000THENPRINT"HERO - 1ST CLASS":GOTO4580
4490 IFEX<26000THENPRINT"DRAGON SLAYER":GOTO4580
4500 IFEX<30000THENPRINT"WARLORD":GOTO4580
4510 IFEX<35000THENPRINT"LORD OF THE HEROS":GOTO4580
4520 IFEX<40000THENPRINT"LORD OF THE PALACE":GOTO4580
4530 IFEX<45000THENPRINT"DEATH DEFYER":GOTO4580
4540 IFEX<50000THENPRINT"MONSTER TAMER":GOTO4580
4550 IFEX<60000THENPRINT"PRINCE OF LIGHT":GOTO4580
4560 IFEX<70000THENPRINT"RULER OF THE VALLEY":GOTO4580
4570 PRINT"MASTER OF ETERNITY"
4580 FORN=0TO3000:NEXT
4590 PRINT@320,""
4600 U=1:GOSUB360:RETURN
```

Degree of difficulty a question

Adventure *Quest of Merravid* **Micro** *Vic 20, 16K, CBM 64* **Price** *£7.95* **Format** *Cassette* **Supplier** *Martech Games, Bay Terrace, Pevensey Bay, East Sussex.*

MARTECH IS the company which produced Conflict for Spectrum and other micros. I must say that I was quite impressed with that offering so, when Quest of Merravid dropped through my letterbox for review, I couldn't wait to start punching the keys.

Martech, I had decided, were innovative and not stuck in a rut like so many other software houses.

I have to admit to being just a little disappointed to find that this was a standard text adventure.'Okay', I thought, 'nothing wrong with that.' Pausing only to pick up a bucket, I plunged into Blackwood Forest . . .

Quest of Merravid allows commands of up to nine words, although I never needed to use more than four. The object of the quest is to retrieve the dwarfs' firestone from the evil dragon. But you cannot enter the dragon's lair until you have collected a full set of armour.

Scattered about the landscape are six items of armour and your charger is a white stallion.

Locations you will find as you wander around include a country inn, a glacier, the King's stables (complete with manure) and a village of headhunters.

The most interesting of these is the inn, where you can interact in a limited way with the regulars and a barmaid — all in the best possible taste of course.

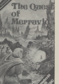
The landscape is quite well laid out and map making is easy. The various problems encountered are not very challenging, so there were no expletives to delete I'm afraid.

The program is written in Basic and, considering the amount of memory available, there are disappointingly few locations.

Overall, I would say that Quest is okay but I would recommend it only for beginners. The more battle-hardened adventurer will breeze through it.

The cassette is supplied in both Vic and CBM 64 versions, one on each side.

For those owners of Conflict by Martech: I have read in several reviews that the rules make no mention of the movement of neutral ships. This is not so, neutral ships move according to force and direction of prevailing winds. **PM**



SOFTWARE INVENTORY

What's on the way in the adventure world — if you have a new adventure, war game or real-life simulation which you are about to release send a copy and accompanying details to Software Inventory, Micro Adventurer, 12-13 Little Newport St, London WC2R 3LD

Foul play in country manor

Adventure *Murder at the Manor* **Micro** *Spectrum 48K* **Price** *£6.95* **Format** *Cassette* **Supplier** *Gemtime, 16 Ben Ledi Rd, Kirkcaldy, Scotland.*

THE phone rang late one night. The only way I could find who was calling was to lift the receiver.

"Hello, Sir," I heard, "this is P C Herring from Gemtown. We've 'ad a 'orrible murder down 'ere, Sir, and to be 'onest, oi can't 'andle it m'sel. Would yer come down and 'elp me out?"

'Ow, I mean, how could I resist such an invitation — after all, if I do say so myself, my reputation is known far and wide.

The local squire, whose safe contains a set of valuable gold coins, has been cruelly done in by a burglar. The local policeman is out of his depth, and your job is to solve the five clues that will lead to the apprehension of the culprit.

The title screen portrays a sleepy little village. Pressing a key starts the adventure. It is conducted with a split-screen. A graphic representation of the current scene takes up the top half of the screen, and text input and information from the computer is shown at the bottom. A compass showing the possible exists is presented at top left.

So far, so ordinary. Murder at the Manor does not differ in the slightest from similar programs from Phipps Associates, Quicksilva and others. The pictures are rather slowly drawn, and, as the program is written in Basic, wrongly typed inputs can result in frustrating waits, until the obligatory PARDON? appears.

Every time a location is visited, the picture is redrawn and this usually takes a long time. It would be better if this process could somehow be skipped. It becomes even more frustrating as many of the locations have exits that seem to loop around to other, already visited locations. Thus, the car park, west of the starting point seems to go on forever if the player continues to head west: Only by veering off at a tangent does the adventurer stumble across further locations.

The village, as far as I have discovered, consists of several shops, a carpark, a police station, a church and a sheep pen.

By SEARCHing you may find several objects. Occasionally you'll stumble across a rabid rat, or a bloodthirsty sheep, who won't hesitate to sink their fangs into your leg or bowl you over, thus sapping your strength.

Strength is displayed when you type SCORE along with the percentage of locations so far visited and the time of day. There is no time limit but some strange things can happen at night, so beware!

While you are walking around the village, your strength is slowly being depleted and the food parcels, thoughtfully left lying around, may be eaten to provide you with much needed energy. As well as the usual commands, such as TAKE, QUIT and HELP, the program features a SAVE GAME routine. You may also, if you feel the need, FIGHT a character. Additionally, you may type in as many commands at one time as you wish. So you may type: SEARCH GROUND. PICK RIFLE. GO NORTH.

As you move around the village you'll meet local inhabitants and you may ask these to give you clues as to the murderer's whereabouts and identity. The replies are entered into your notebook, and at any time you may READ NOTES. The replies will then be redisplayed on-screen for you to inspect.

The unique thing about Murder at the Manor, is that each time you play, a different character is chosen as the murderer. Thus, as in Cluedo, each game is different. While not as sophisticated as some American Adventures (such as those from Infocom), which include case notes and newspaper cuttings, Murder at the Manor will certainly help you while away many hours trying to unravel the mystery. **TB**

Legacy of gems and wizards

Adventure *Wizardry III: The Legacy of Llylgamyn* **Micro** *Apple II+, IIE, III* **Format** ▷

◁ *Disk* **Supplier** *Sir-Tech Ogdensburg, New York.*

AT LAST the third Wizardry scenario Legacy of Llylgamyn has arrived, complete with the much-vaunted Windo-Wizardry.

Now Wizardry fans can stop watching television, reading books and doing all those other fill-in activities, and get on with the serious business of saving Llylgamyn from a fate worse than Visicalc.

In case you've been away for the last few years, we'd better explain that Wizardry is a role-playing fantasy adventure game and was voted the most popular piece of software by the readers of Softalk magazine.

The first package, Proving Ground of the Mad Overlord, set the style and the second scenario, Knight of Diamonds, required a character to be transferred from the Proving Ground. In legacy of Llylgamyn a character can be transferred from either the first or second scenarios so you don't need to have completed Knight of Diamonds.

In view of the fact that Legacy will only sell to owners of at least Proving Ground we'll assume you know the basic style. The two questions I'll try to answer are: is Windo-Wizardry all it is claimed to be and how does the third scenario rate?

According to a quote featured in the press handout Windo-Wizardry emulates the window graphics of the Apple Lisa. Having used the Lisa system, we believe that this is a bit of an over-statement. To paraphrase Richard Lovelace, windows do not a Lisa make nor trailing wires a mouse. But ignoring such comparisons, Windo-Wizardry is a definite improvement on the old Wizardry display.

The idea is that the familiar three-D maze display fills the screen, but information is superimposed on this when necessary. Hence, rather than have the screen divided into the various boxes with the information always there, the maze is given the prominence it deserves and windows are overlaid. In fact windows can overlay each other and it is probably this aspect which led to the comparisons with Lisa. However, the sizes of the windows and their positions on-screen are fixed by the program rather than the user.

The game comes on the usual double-sided disk with the master on one side and the scenario on the other. Since it requires characters from either Proving Ground or Knight of Diamonds, your first job is to transfer your characters onto a copy of the scenario disk. You must use a copy of the scenario disk, but it's now possible to make a copy even if you only have one disk-drive.

During the transfer process you can change the alignment of a character so your evil image can suddenly become as pure as the driven snow. But neither good or evil can succeed alone, so your party will be a motley bunch.

Before the game begins there is what amounts to a hi-res picture book to explain the story. This is an interesting departure from the usual Wizardry style, but it's a pity the reader isn't given control of the page-turning. If you spend too long looking at the pretty pictures, you miss the narrative.

After all the copying, transferring, and so forth, what about the game? Well, Wizardry fans shouldn't be disappointed because all the familiar aspects are there — mazes, nasties to fight, treasures to win and riddles to answer before completing the quest. One of the levels contains what the designers consider to be "the worst mapper's nightmare ever to appear in a Wizardry scenario", so be warned.

A new Wizardry scenario would have been news anyway, and the addition of Windo-Wizardry makes the game even more enjoyable. As the long winter nights draw in, put another log on the fire and go forth into the unknown to save your people ... this is the Legacy of Llylgamyn. **CM**

Unwelcome gremlin guests

Adventure *Operation Gremlin*
Micro: *Oric 48K* **Price:** *£6.95*
Format: *Cassette* **Supplier:** *Wintersoft, 30 Uplands Park Rd, Enfield, Middx.*

A GRAPHIC-centred adventure with arcade action, Operation Gremlin is set in a space city that has been over-run by gremlins.

Captain Bono and his crack squad of seven troopers have been sent in to rid the now evacuated city of its unwelcome visitors.

The city is shown as an aerial view, with lanes and highways connecting various buildings such as the space port, soya store, observation dome, leisure centre and broadcasting studio. The map is much larger than your tv screen so scrolls in the direction of the trooper being moved.

Each trooper is represented as a small figure. Controlling any one of the troopers at a time, you move around the city by means of the up, down, left and right cursor keys. Dotted around are various objects, mostly weapons. A trooper must move into one of these objects and the key P pressed to pick up the object (D drops it).

Pressing the I key reveals what the object is. Only one object can be carried at a time and not all weapons are harmful to the gremlins. Part of the fun is discovering what weapons have what effect.

Training plane takes flight

Simulator *737 Flight Simulator*
Micro: *BBC 32K* **Price:** *£9.95*
Format: *Cassette* **Supplier:** *Salamander, 17 Norfolk Rd, Brighton.*

IF YOU are very lucky I won't be piloting your 747 holiday flight next summer.

If this program is any indication of my flying abilities the chances of me ever getting you and Aunt Edna more than halfway to Majorca is roughly zero.

The program comes in a large, padded video-cassette-type packet complete with a 28-page manual on the extensive controls required to fly the simulator.

As with other programs of this kind the aspiring pilot must spend quite some time familiarising himself with the many commands and options before taxiing down the runway.

To enable the novice to have a quick flip there is a step by step set of instructions which will get you airborne. All you have to do is get down again.

The screen layout consists of a fair representation of the analogue and digital instrument panel. However, I would have preferred more clocks and dials than the large number of digital readouts which, while they may be easier to read, do not give quite the same effect as the more traditional panel.

In addition to the standard instruments there are radio beacon indicators and an instrument landing system.

A pilot's view is given above the panel showing the converging lines depicting the runway during take-off and landing. The runway is replaced by an aircraft track map during flying time. This map shows aircraft position relevant to the runway and surrounding beacons.

A new runway and beacon layout can be set up using options set by the player. This can include ground atmospheric conditions for that day.

To take off fly a holding pattern then return safely to the runway. Using the radar and radio beacon signals takes many hours of dedicated practice. My airfield is now pock-marked with craters and the control tower can't be seen for wreckage.

Simulator programs are a strange mixture of game and education. They have little novelty value (although it can be fun to switch the engines off at 2000 feet) and I suspect they have little relationship to actual flying.

If you are interested in flying a jumbo, this simulator is well up to the standard of those available for the Beeb. **AM**



Some have most alarming consequences but I'm not telling you what and which.

Gremlins are of three types: eggs, greebs and gremlins. Both eggs and greebs are stationary, but the eggs hatch into greebs and the greebs turn into gremlins. The gremlins are bouncing space invader like creatures which move around the city. To destroy any type the trooper must be alongside, possess a suitable weapon and press one of the keys immediately above the cursor keys (to aim the weapon in the appropriate direction).

Other commands at your disposal are S which gives a status report, E to eat, T to use a transport shuttle (for fast movement across parts of the city), 1-8 to control one of the eight troopers, and R to repair a damaged building. You can use U to unlock something (you'll have to figure out the use of this yourself). All text messages appear at the bottom of the screen with scores and statistics at the top.

Various catastrophes occur from time to time, such as screen-shaking cosmic storms. The adventure is played in real time though you do have a choice of nine difficulty levels and a short or long game.

It is an interesting and enjoyable romp which, played against the clock, provides a stimulating and challenging game. Professionally produced and well worth the price. **BC**

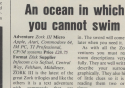
Mystery of the machine

***Adventure** Time Machine **Micro** BBC B, Spectrum **Price:** £9.95 **Format** Cassette **Supplier** Digital Fantasia, 24 Norbreck Road, Norbreck, Blackpool, Lancashire.*

TIME Machine is one of a series of Mysterious Adventures, all currently available.

The cassette case came in a huge cardboard box with the publisher's name all over it. (I suspect most people would throw this away). There is also a booklet enclosed, which is a general guide to mysterious adventuring.

The program is text only, written in machine code, so screen updates are near instantaneous. The screen is divided in two. In the top half is a brief room description and list of objects, while the rest of the screen is a text window for commands. These follow the usual GET LAMP format, and if the program cannot understand it gives some indication why.



There are no specific instructions given in the packaging so you have to find out for yourself, by playing the game or reading Digital Fantasia's advertising, that the object is to rescue a professor by finding the three missing prisms which control his time machine.

The machine is the integral part of the adventure, and using it you must travel (somewhat erratically) through time to eventually find all three prisms.

The machine's behaviour is perhaps the most infuriating part of the whole game, as to get anywhere you must ENTER MACH, PUSH one of the two controls, and LEAVE MACH to see where you are. As far as I can see there is no logic to the machine's travel.

Time Machine could be described as a passive adventure, that is there are no dwarves to axe, or dragons to slice up. This is a puzzle-solving game, sometimes easy, sometimes hard. All of the puzzles are logical, which is the one criticism I have of this adventure. Everything is there for a purpose. I like this in itself, but would welcome a few red herrings along the way, and so far I have found none. After two days I had found two of the prisms and was on the way to the third.

You will find no dreaded spelling mistakes, or bugs in the adventure. It is very playable, including SAVE of position. There is nothing really wrong with any of it but at nearly £10 I believe that it is slightly overpriced. **MW**

On a wide knife's edge

***Adventure** The Knife of Kishtu **Micro** Dragon 32 **Price** £7.95 **Format** Cassette **Supplier** Future, 6 Arundel Close, Chatham, Kent.*

The Knife of Kishtu is a role-playing adventure with a touch of Dungeons and Dragons character creation mixed in for good measure.

The game is played in and around an ice citadel and the usual commands GET (KNIFE), EAT (FOOD) are ▷

An ocean in which you cannot swim

Adventure *Zork III* **Micro** *Apple, Atari, Commodore 64, IM PC, TI Professional, CP/M systems* **Price** *£28.75* **Format** *Disk* **Supplier** *Infocom c/o Softsel, Central Way, Feltham, Middlesex.*

ZORK III is the latest of the great Zork trilogies and like the others it is a text adventure with commands that are entered into the computer as sentences and allow you to do more than one thing at a time.

Unlike the others, Zork III is a fairly small world and experienced adventurers may not need to map it although a map is a great help in certain places.

Being a small world does mean that there are few puzzles to figure out, but those that are there are real meanies and this adventure will take just as long to solve as any other.

Experienced Zorkers expecting to get points for cracking difficult puzzles will be disappointed here. The points come from doing relatively easy things. There are only seven points to gain and you may have amassed a number of these and still not have realised what is happening.

The adventure starts at the bottom of an endless staircase and lying around is our old friend from past adventures the brass lamp, now looking slightly tarnished I shouldn't. wonder.

Moving around you will find an Elven sword. Don't waste your breath trying to remove it from the rock it is embedded in. The sword will come to you later when you need it.

As with all the Zork adventures you must read the room descriptions very carefully. They are well written and describe your surroundings graphically. They also hide lots of little clues so it is worth reading them two or three times.

Other places of interest in the Zork III tour are the Flatbed ocean. You cannot swim here but hang around for a while and something may happen. You will be able to swim in the lake.

Swimming west will take you to a place called the Scenic Vista. An important place this. Take your time and examine objects with care. Re-entering the lake and swimming on you will eventually come to a cave. What you did at Scenic Vista will pay dividends here.

Shadow Land is where you first come across the mysterious cloaked figure. He will block your way and although fighting him may help your frustration it will help to solve the adventure.

Continuing through the game you will enter the museum, the jewel room and the royal puzzle, which incidentally is one of the toughest parts of Zork III and has only one solution as far as I can see.

I will not spoil it by telling you more, but you will meet the guardians of Zork and eventually the dungeon master. Good hunting. **RS**

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◁ recognised in the adventure.

The cassette comes with a comprehensive instruction booklet. The program has so far loaded over 20 times with not one I/O error.

Your objective in this adventure is to rescue Lovilia, the King's daughter, and return her safely home. To help you in your mission up to four characters with their own special abilities such as wisdom, can be created. An alternative is for four other people to play the game at one session, thus players could help each other when facing a problem.

The games vocabulary is quite large, but only a few commands are given to you before the game so a procedure of trial and error must be used to find and remember the correct commands.

The response times are slow at four to five seconds but when a game is as enjoyable as this one, time does not matter.

The Knife of Kishtu is an entertaining adventure with some intriguing problems, but on the whole any average player or beginner could finish the game in a few weeks. **SM**

Hybrid wins the accolades

***Adventure** Atic Atac **Micro** Spectrum 48K **Price** £5.50 **Format** Cassette **Supplier** Ultimate Play the Game, The Green, Ashby de la Zouche, Leicestershire.*

ULTIMATE already have a formidable reputation among arcade-game fans, but Atic Atac is bound to fix their name firmly in the minds of adventurers.

There have been a number of attempts to breed a hybrid arcade-adventure, most notably Crystal's Halls of the Things and Atic Atac is the first game to transcend this worthy ideal to give us something new and original. It has the feel of both its ancestors without their flaws.

Simply put, this is a magnificent game. In a haunted castle you must search the five floors from atic to cellar for the three parts of the key you need to escape. On the way you'll meet thousands of nasties from witches and monks to flying pumpkins which you can zap in traditional arcade style.

Every room is displayed three-dimensionally from above and many are furnished lavishly. Transition from room to room is smooth and instant. The illusion of frenzied movement through a vast, labyrinthine building is utterly convincing.

To enhance the adventure side of the game there are more powerful enemies like Dracula and the mummy who must be fought with special objects found scattered throughout the castle.

There are different coloured keys to be picked up to open coloured doors, and you must constantly replenish your food supply (graphically represented by a self-consuming roast chicken).

You can also choose to be a serf, knight or wizard, which affects the routes you travel and weapons you use.

When you finally die both an arcade-type score and an adventure success percentage are shown, so you can play the game to favour either of these goals.

With superb animation, easy control of your actions (you don't need six hands to use the controls), a huge area to explore and all wrapped up with a great sense of humour for a modest £5.50, this game can be recommended without reservation. **DD**

This town is coming like a . . .

***Adventure** Ghost Town **Micro** Spectrum 48K **Price** £5.95 **Format** Cassette **Supplier** Virgin Games, 61-63 Portobello Rd, London.*

GHOST TOWN is as you'd imagine from the title an adventure set in a deserted burg somewhere in the old west.

When the game begins you find yourself, without the benefit of a single instruction to tell you why you're there or what you're looking for, in the main street. The only thing to do is explore, and luckily there is an on-screen display showing the street plan of the immediate area. You set off eagerly into the saloon or the hotel.

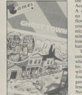
At this point disillusionment sets in. Most of the buildings have no graphical illustrations and many consist of only one room. All of them are strikingly barren and it soon becomes apparent that most of the things described are only there to set the scene, since you can't look at them more closely, examine them, or affect them in any way.

The words "You can't" become all too familiar, since they are the response to all but the most obvious commands.

The problems to overcome are similarly straightforward, so once the requisite mundane objects have been collected it's a short trek across the desert to the gold mine, which inevitably turns out to be your goal.

By far the best things about Ghost Town are the Graphics. The street plan is useful and clear, the pictures of rooms (all two of them) are very attractively drawn, and the maze which forms the major obstacle to finding gold is convincingly depicted.

The program defines its own character set which is clearly designed and an improvement on Spectrum's. But the plot and descriptions are so ordinary and the choice of actions so limited that Ghost Town would probably be boring for the experienced adventurer and frustrating for the novice. Overall, not a bad game, but certainly nothing special. **DD**



A bug worth finding

***Adventure** Castle of Riddles **Micro** BBC **Price** £11.50 **Format** Cassette **Supplier** Acornsoft, 4A Market Hill, Cambridge.*

WHILE dusting out one of the dungeons I trod on a cassette which one of the dwarfs must have dropped. On wiping off the bat's blood I found it to be Acornsoft's Castle of Riddles. A quick look round revealed no traps so I picked it up and flew (which is a clever trick if you know how to), to my micro. Kicking an inquisitive minor demon out of the way I loaded up and prepared to do battle.

The quest it appears is to enter the castle of a sorceror which has been taken over by his evil rival and then return with the Ring of Power. I found myself outside the main gate of the castle with paths leading off round the back. Nothing ventured I went straight in — wrong! Picking myself up I returned and

finally entered the main courtyard where surprise, surprise the Ring is easily found. I grabbed it — wrong!

Needless to say this is another great adventure from the Acornsoft stable. It has good atmosphere and a wealth of traps.

The game has the additional incentive of a large prize for the first fearless hero to solve the final mystery and I assume it was for this reason that the many mazes have been included. Personally I hate mazes but as these have novel solutions I will forgive them. As the game has a continuous story line I found it more exciting than some of the earlier adventures from Acorn and some of the traps have a nice touch of demonic humour.

For those sneaky individuals who can't resist the impulse to cheat I'm afraid Acorn's chief wizard has made this game almost "bomb, proof". Being pretty sneaky myself I've spent some time trying to wrest the secrets from the code and I'm not winning.

Needless to say I, like the Wishing Well bucket, am now stuck in the mud beneath the castle. I only hope some other adventurer comes along soon to help get me out as I've a nasty suspicion my lamp is going dim and that damn giant spider is still around here somewhere. **AM**

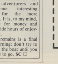
First impressions worth overcoming

Adventure Invincible Island ***Micro*** *Spectrum 48K* ***Price*** *£5.95* ***Format*** *Cassette* ***Supplier*** *Richard Shepherd Software, Elm House, 23-25 Elmshott Lane, Cippenham, Slough, Berks.*

MY FIRST impression of Invincible Island was that it left a lot to be desired.

The tape took an interminably long time to load and the on-screen introduction was formatted slowly with an annoying beep accompanying the arrival of each letter. But I have to admit that if I had left it at that I might never have enjoyed this wonderfully compact adventure.

The screen is split into two distinct areas. The top third or so is for graphics where a different picture is presented for each location. This means that there is little difficulty involved in determining your current whereabouts during the adventure.



The remainder of the screen is the scrolling-text window. Unlike other adventures of this type there is no separate command area so your instructions scroll up the screen along with all the normal information.

Multiple commands are catered for, and can be quite a timesaver. The package includes the usual SAVE and LOAD facilities.

Basically, the scenario revolves around a letter you have received informing you that there is a large amount of treasure on this island to be had. But first you must find the seven parchments of Xaro. The parchments can be examined on-screen and reveal a coded message as to the whereabouts of the treasure. Your aim is to depart from the island with the treasure, and your life!

This program is an ideal, frustrating introduction for first-time adventurers and poses some interesting problems for the more experienced. It is, to my mind, good value for money and should provide hours of enjoyment for all.

All that remains is a final word of warning: don't try to sail away in the boat until you know where to go. **SC** □

How to write your own adventures

***Andrew Pepper** describes some of the techniques programmers use when writing adventures*

Space Ship

Deserted Ship

Star Base

Ice Planet

Lunar Dome

Jungle Planet

Black Hole

Ancient Planet

Alien Battle Cruiser

Figure 1: typical overall map of a space-type adventure

ADVENTURE GAMES, or Role Playing Games, have been available on mainframe computers for many years, usually available only to a select few.

Crowther and Woods' *Adventure* is probably the most well-known fixed adventure (ie set in a fixed map). *StarTrek*, developed by Hewlett-Packard, is the best known random adventure with each map different, although developed within fixed constraints.

Recently, in the past three to four years, personal computers have begun to have standard memories of reasonable size (16-64K). This has allowed adventure programs to be written for the personal computer, producing a new generation of adventure games and, because of the large market, setting new standards.

Adventure programs are generally quite large because of the number of messages associated with them. This does not mean that they are difficult to write: I normally would expect to produce an adventure game within a week. Most of the week being spent in sheer typing. Adventure programming, like writing, is 10% inspiration, 90% perspiration.

You must first of all decide what kind of adventure you wish to write. This is where inspiration plays its major part. Normally, as far as I am concerned, I have the idea then write the adventure. Sitting down and trying to think of a subject does not seem to work for me. However, when choosing your scene there are guidelines you should follow.

Adventure programs are generally used as an escape. When playing one you can imagine yourself in command of a spaceship, travelling the universe at warp speeds, or a mighty warrior, exploring a maze of magical passages in search of treasures.

You should remember that the program is an escape from reality. People are more likely to enjoy a program which has Rlueke, the space knight, exploring the cosmos than, say a program which involves, Eric Groat exploring the Nörthern line. Adventures should be exciting, dangerous and unpredictable.

Dreaming

From this premise the range of adventure subjects should be limitless: "Any dream you want to have". In practice adventure programs are very commonly set either in space or in a cave system such as *StarTrek* and *Adventure*.

It is an advantage to know something about the subject you are writing a program about. Not that you have fought a dragon or flown the space shuttle, but if you have a passion for science fiction then a space adventure of some kind might be a good one to start with. Whatever the case research the subject.

Suppose you have decided to write a space adventure of some kind (you may not know what kind yet). If people are going to be able to believe that they really are flying a spaceship then you need to build up a picture of what the spaceship is like: how is

it propelled? Is hibernation required for flight? How large is it? What instrumentation does it have? All these questions (and more) should have an answer.

As well as specific questions it is important to read around the subject; you do not want to make a major technical gaffe such as arming the spaceship with machine guns. That is why it is an advantage to write about something in which you are already interested.

Killing

There are two main types of adventure, fixed and random. Both have their own characteristics. Fixed adventures are so called because they have a fixed map. The rooms in the adventure are always in the same place and have the same contents. Adversaries who are met will be killed in the same way. The enjoyment comes because there are usually a large number of rooms, typically around 100, which take time to explore. There also are many problems that have to be solved to get from one stage to the next. These problems are usually designed to drive people mad trying to solve them.

Random adventures are not completely random. They have a fixed underlying structure. *StarTrek* is a good example. The basic idea is that you are captain of the Enterprise roaming the galaxy seeking and destroying Klingons.

The number of Klingons, stars and starbases in each game is random, as is the positions of the Klingons and the amount of energy required to kill them. On the other hand there is a fixed number of quadrants in each game (normally 64 or 100) containing a fixed number of sectors (64 or 100). Klingons are always bad news, you never play a game in which they don't try and shoot at you. The Enterprise always has the same characteristics.

Both adventure types have advantages and disadvantages. Fixed adventures are a one-off game. Once you have explored the game and found all the nooks and cranies that's it. Bear in mind that, if you are writing adventures to play yourself, you will know all the answers when you are playing, making the whole thing quite boring.

Random adventures can be played endlessly. The only adventures I play which I wrote are random. They are, in general, harder to write. They require careful balancing of several parameters to ensure that each game is interesting to play. Who would want to play *StarTrek* if there were only two Klingons a game?

As this is intended to be an introduction to the techniques of adventure programming I will stick to the fixed-map adventures. But I will describe how random parameters in a fixed-map adventure can give the best of both worlds.

In principle the entire map should be drawn and all the messages defined before a single byte of program is written. In practise drawing the map in this way is very tedious.

I usually work with the map at two levels: the overall picture of the game and the individual rooms.

In a fixed adventure there are a number of areas or sections. In a space adventure, for example, it is convenient to have each planet as an individual section. Each section is, in turn, divided into rooms. The term room has more than a literal sense. It could also be a cave, corridor or planet.

The total number of rooms is fixed by the amount of memory you have available and how efficiently that memory is used. I normally have about 100 rooms in my 32K NewBrain, which uses ANSI standard Basic. If you have only a 16K machine or want to draw pictures of each location then you will probably have to think about using machine code to get the efficiency of storage possible at that level.

I usually plan the overall map before starting to write the program. By this I mean that I know the types of incidents and situations I envisage occuring in the game but I do not know have a precise description of the rooms involved.

A typical overall map of a space adventure is shown in figure 1. Obviously I do not draw each map out so neatly but I do keep it on one piece of paper. If possible you should work on an A3 sheet. But any large sheet will do.

The overall plan should indicate the name of each area. Notice that at this stage I have divided the adventure into around 10 sections. This gives about 10 rooms per section.

You should decide what objects are to exist in the adventure, and monsters ▷

Monster	Found	Dealt With
Rat	Deserted Ship	Ice Axe or Space Gun.
Giant Alien Android	Alien Battle Cruiser	Destroyed by Plarthedon which also gets destroyed at same time. Space Gun - no effect.
Armoured Ice Monster	Ice planet	Space gun at feet (thin ice notice gives clue). Ice axe only found after killing Monster.
Plarthedon	Jungle Planet	Fed with Space Cookie (Plarthedon described as hungry when first met). Plarthedon will follow you only to alien battle cruiser.
Guardian	Star Base	Show Earth Badge which proves from Earth. Allows you onto base. Else must leave.

Objects	Found	Effects
Space Gun	Space Ship	Melts ice. kills small creatures without armour.
Android arm	Deserted Ship	Open emergency air lock on Star base without your arm being chopped off!
Earth Badge	Star Base	Used by Nav. Computer as indication that owner from Earth.
Ice axe	Ice planet	Used on Jungle Planet to make handholds to climb tree. Or used as weapon against small enemies.
Space cookie	Star Base	Bought in Star Base Refectory. Can be eaten (by owner) or fed to Giant Plarthedon met on jungle planet to make friendly.
Steller Coin	Lunar Base	Required to buy Space Cookie.
Nav. Computer	Deserted Ship	Required to navigate to Ancient Planet.
Star Map	Black Hole	Co-ordinates of Ancient Planet (different each run to stop cheats) required to navigate to Ancient Planet.
Zero gravity machine	Alien Battle Cruiser	When placed on object makes weight zero. Normally no effect on anything but gives access to ancient planets' cave system.

Figure 2: objects for the adventure, plus monsters to meet

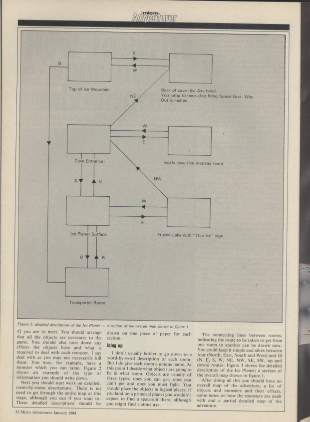


Figure 3: detailed description of the Ice Planet — a section of the overall map shown in figure 1.

◁ you are to meet. You should arrange that all the objects are necessary to the game. You should also note down any effects the objects have and what is required to deal with each monster. I say deal with as you may not necessarily kill them. You may, for example, have a monster which you can tame. Figure 2 shows an example of the type of information you should write down.

Next you should start work on detailed, room-by-room descriptions. There is no need to go through the entire map at this stage, although you can if you want to. These detailed descriptions should be drawn on one piece of paper for each section.

Icing up

I don't usually bother to go down to a word-by-word description of each room. But I do give each room a unique name. At this point I decide what objects are going to be in what room. Objects are usually of three types: ones you can get, ones you can't get and ones you must fight. You should place the objects in logical places; if you land on a primeval planet you wouldn't expect to find a spacesuit there, although you might find a stone axe.

The connecting lines between rooms, indicating the route to be taken to get from one room to another can be drawn now. You could keep it simple and allow between four (North, East, South and West) and 10 (N, E, S, W, NE, NW, SE, SW, up and down) routes. Figure 3 shows the detailed description of the Ice Planet; a section of the overall map shown in figure 1.

After doing all this you should have an overall map of the adventure, a list of objects and monsters and their effects, some notes on how the monsters are dealt with and a partial detailed map of the adventure.


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YOUR ADVENTURES

This month's selection concentrates on the Sinclair machines — offering the first part of a new adventure from Keith Parrock and an auto-repeat facility for the ZX81. Keith's Castaway adventure involves collecting 25 items to refit your boat, while avoiding traps and solving problems. The program responds to 32 words — including what becomes a deeply felt need, PRAY.

J. Gallagher has a different solution to another type of problem — the lack of an auto-repeat facility on the ZX81. His program gives you just that. Next month we'll be featuring the second and final part of Castaway, along with tips for other micros — so keep on sending in your adventures and any program routines.

Send us your adventure listings — modules which readers can incorporate into their own games, short adventures and useful programming routines are all welcome. Please send us a printout and cassette along with a general description of the program and details of how it is constructed and can be used. If you want us to return your program, enclose a stamped, addressed envelope. If you have any queries on the listings, write to the appropriate author, Your Adventures, Micro Adventurer, 12-13 Little Newport St, London WC2R 3LD

Auto-repeating on the ZX81

An auto repeat facility for the ZX81 from J. Gallagher in Kingsbury, London

ONE OF THE disadvantages of any sort of input on the ZX81 is the computer's lack of an auto repeat facility on its keys.

This program gives you just that. It works by intercepting the display interrupt (called 50 times a second) using interrupt mode 2. The routine is held at 7F20 onwards.

If a key is held down for a short while (adjust this by poking 32566 with a value from one to 255) then the routine continuously sets the debounce system variable to 0, making the operating system think it has received a new keypress.

Enter the hex loader followed by the hex code in the disassembled listing. Delete lines 10-90 and then enter the second program. Run to save. To call the routine Randomise Usr 32537.

```
7F01 POP DE          D1
7F02 LD BC,7F19      01 19 7F
7F05 PUSH BC         C5
7F06 PUSH DE         D5
7F07 LD A,1E         3E 1E
7F09 LD I,A          ED 47
7F0B LD A,DD         3E DD
7F0D LD B,F7         06 F7
7F0F DJNZ -2         10 FE
7F11 LD BC,1901      01 01 19
7F14 IM 1            ED 56
7F16 JP 38           C3 38 00
7F19 PUSH AF         F5
7F1A LD A,7E         3E 7E
7F1C LD I,A          ED 47
7F1E IM 2            ED 5E
7F20 LD A,(4025)     3A 25 40
7F23 CP FF           FE FF
7F25 JR NZ,7         20 07
7F27 LD A,00         3E 00
7F29 LD (4021),A     32 21 40
7F2C POP AF          F1
7F2D RET             C9
7F2E LD A,(4021)     3A 21 40
7F31 INC A           3C
7F32 LD (4021),A     32 21 40
7F35 CP 0A           FE 0A
7F37 JR NC,2         30 02
7F39 POP AF          F1
7F3A RET             C9
7F3B LD A,00         3E 00
7F3D LD (4027),A     32 27 40
7F40 POP AF          F1
7F41 RET             C9
7F42 NOP             00
   HEX-LOADER
   1 REM ....AT LEAST 68 DOTS...
....................................
....................................
...........
  10 POKE 16514,1
  20 POKE 16515,127
  30 LET A=16516
  40 LET A$=""
  50 IF A$="" THEN INPUT A$
  60 POKE A,16*CODE A$+CODE A$(2
)-476
  70 LET A=A+1
  80 LET A$=A$(3 TO )
  90 GOTO 50
   5 SAVE "REPEAT"
  10 FOR A=0 TO 67
  20 POKE 32511+A,PEEK (16514+A)
  30 NEXT A
  40 POKE 16389,126
  50 NEW
TO START ROUTINE TYPE- RAND USR
32537
```

Sinclair castaway

A ZX Spectrum game from Keith Parrock in Middlesex

In Castaway you are shipwrecked on a South Pacific island. Scattered around this island are 25 items needed to refit your wrecked boat.

On the island there are 105 locations, split into eight geographical sections.

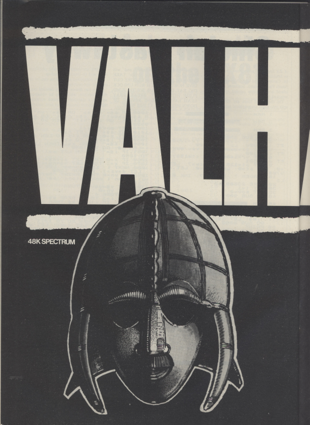
The program understands and will respond to the following words: TAKE DROP KILL INVENTORY SCORE CUT DIVE NORTH SEARCH RUN UNLOCK DIG EAT DRINK RUB SOUTH JUMP PUSH HIT SHOUT BREAK PRAY READ EAST EXAMINE REVEAL UP DOWN HELP PULL CLIMB WEST.

There are many traps and problems to solve and an interesting ending.

Part completed adventures can be saved on tape and restored later.

Keith has drawn a fully detailed map of the adventure, which can be obtained by sending a stamped addressed envelope to this magazine (second part next month).

```
   1 REM   CASTAWAY
   2 REM   [illegible]
   3 REM   [illegible]
   4 GO SUB 9800
   5 LET lr=1999: LET fs=1998: LET ls=9000: LET os=9800
   6 LET oz=9500: LET vs=7000: LET cs=7100
   8 LET vr=1480: LET ct=1997: LET dr=1601
   9 LET st=125: LET cw=7: LET z=0: LET sc=0: LET res=0: LET rr=9700
  10 BORDER 7: PAPER 7: INK 0: CLS
  20 POKE 23609,60
  30 LET l=1
  35 LET mov=0
  40 GO SUB 900
  45 REM   LOCATION OBJECT RETURN
  50 POKE 23692,255: RESTORE l+ls: READ m$: PRINT "You find yourself ";m$: LET q$="Nearby there is": GO SUB 2000
  60 PRINT
  70 GO SUB 1000
  90 GO SUB vr+vn*20
 100 IF f=0 THEN GO TO 60
 110 PRINT : GO TO 50
 900 RESTORE os: READ oc: DIM o(oc)
 910 FOR i=1 TO oc: READ o(i): NEXT i
 920 RESTORE vs: READ vc
 928 REM   BEACH/JUNGLE/TEMPLE
 929 REM    AND CAVES TEXT
 930 LET dd=0: LET be=0: LET lu=0: LET gu=0: LET la=0: LET e$="on a stretch  of beach, some way from your    wreckage. The last few remainingpossessions are only just in    view...": LET p$="in a jungle.  Lush plants and trees tower overyou. The vegetation is so dense here as to make progress very   slow...": LET k$="in an inner   chamber of the temple. There is no light save from your flare...": LET c$="in caves  at   sea level. You splash through   isolated pools of water, while  still more drops from the roof  onto your head...": LET s$="in part of thecaves where solid rock surroundsyou..."
 940 RETURN
 999 REM   COMMAND WORD ROUTINE
1000 INPUT "Now what? "';s$: IF LEN s$=0 THEN GO TO 1000
1001 IF s$="save" THEN GO TO 9995
1005 IF s$="quit" THEN GO TO 9990
1006 IF s$="help" THEN GO TO 9900
1007 IF s$="look" OR s$="view" THEN GO TO 50
1008 IF s$="climb" OR s$="run" OR s$="shout" OR s$="pull" OR s$="search" OR s$="hit" THEN GO TO 9920
1009 LET mov=mov+1
1010 LET a$="": LET n$=""
1020 LET x=0: FOR i=1 TO LEN s$
1030 LET i$=s$(i TO i)
1050 IF i$=" " AND x=l THEN LET i=LEN s$: GO TO 1080
1051 IF i$=" " THEN LET x=1: GO TO 1080
1060 IF x=0 THEN LET a$=a$+i$
1070 IF x=1 THEN LET n$=n$+i$
1080 NEXT i: LET w$=a$: LET c=vc: LET d=vs+1: GO SUB 1200
1090 IF vn=0 THEN PRINT "Sorry, but I don't understand"'a$: GO TO 1000
1100 LET v$=y$: RETURN
1200 LET vn=0
1210 RESTORE d
1220 FOR i=1 TO c: READ m$: LET x=LEN m$: IF x>LEN w$ THEN LET x=LEN w$
1240 IF w$( TO x)=m$( TO x) THEN LET vn=i: LET y$=m$: LET i=c
1260 NEXT i: RETURN
1300 IF n$="" THEN GO TO 1311
1301 LET w$=n$: LET c=oc: LET d=os+1: GO SUB 1200: IF vn=0 THEN GO TO 1311
1310 GO TO tr
1311 PRINT "I'm not sure what you mean": GO TO fa
1460 REM   VERB ORDER [illegible]
1461 REM   MUST BE SPACED EVERY
1462 REM   20 LINES - [illegible]
1500 LET d=1: GO TO dr
1520 LET d=2: GO TO dr
1540 LET d=3: GO TO dr
1560 LET d=4: GO TO dr
1580 LET d=5: GO TO dr
1600 LET d=6
1601 PRINT : RESTORE l+ls: READ m$: FOR i=1 TO d: READ nl: NEXT i
1602 IF nl=0 THEN PRINT "You cannot go that way": GO TO fa
1603 RESTORE nl+ls: READ m$,s,s,s,s,s,s
1604 READ s
1605 GO SUB cs+s: IF f=0 THEN GO TO 1611
1610 IF o(1)=0 THEN LET l=nl: GO TO tr
1611 PRINT "Something stops you from          proceeding": GO TO fa
1619 REM   TAKE ROUTINE
1620 GO SUB 1300: IF f=0 THEN RETURN
1621 IF o(vn)<>l THEN PRINT "It's not here": GO TO fa
1622 RESTORE oz+vn: READ s: IF s<0 THEN GO TO ct
1624 READ s
1625 READ s
1626 GO SUB cs+s: IF f=0 THEN GO TO ct
1630 IF cw<>0 THEN LET cw=cw-1: LET o(vn)=0: PRINT "Okay, you ha
```


VALH
48K SPECTRUM

```
ve it": RETURN
1631 PRINT "You are carrying too much": GO TO fa

1639 REM  DROP ROUTINE

1640 GO SUB 1300: IF f=0 THEN RETURN
1641 IF o(vn)<>0 THEN PRINT "You are not carrying it": GO TO fa
1642 RESTORE oz+vn: READ s
1643 PRINT "Okay, it's dropped": LET o(vn)=l: IF l=1 AND s<>0 THEN LET sc=sc+s: LET o(vn)=-1: PRINT '"That's a piece of equipment    towards your refit!"
1644 LET cw=cw+1: IF sc=250 THEN GO TO 9980
1645 RETURN

1659 REM  FIGHTING MONSTERS KILL ROUTINE

1660 GO SUB 1300: IF f=0 THEN RETURN
1661 LET t$=y$: LET mn=vn: RESTORE oz+vn: READ s,ms: IF s>=0 THEN GO TO ct
1662 LET s=0: INPUT "By what means? ";w$: IF w$="" THEN GO TO 1670
1663 LET c=oc: LET d=os+1: GO SUB 1200: IF vn=0 THEN GO TO 1662
1664 IF o(vn)<>0 THEN GO TO 1662
1665 RESTORE oz+vn: READ s,s: IF s=0 THEN GO TO 1662
1670 PRINT : LET s=s+st: IF ms>s+RND*20 THEN GO TO 1679
1671 IF s>ms+RND*15 THEN GO TO 1678
1672 PRINT "The ";t$;" fights back."'"You begin to feel weaker..."
1673 LET st=st-RND*5: GO TO tr
1678 PRINT "You have killed the ";t$: PRINT "The body vanishes from sight!": LET o(mn)=-1: GO TO tr
1679 PRINT "The ";t$;" has killed you!": GO TO rr
1680 LET l1=l: LET l=0: LET q$="You are carrying:": GO SUB 2000: LET l=l1: GO TO tr

1699 REM  SCORE AND MOVE COUNT

1700 PRINT "Score ";sc;" in ";mov;" moves": GO TO tr

1719 REM  CUT ROUTINE

1720 GO SUB 1300: IF f=0 THEN RETURN
1721 IF vn<>19 OR o(2)<>0 THEN GO TO ct
1722 LET o(14)=o(vn): LET o(vn)=-1: PRINT '"Sail canvas falls from the tree.": RETURN

1739 REM  DIVE ROUTINE

1740 IF l<>10 AND l<>58 THEN GO TO ct
1741 IF l=10 AND o(3)<>0 THEN PRINT '"You have not the equipment with you for diving. You cannot hold your breath and you drown!!": GO TO rr
1742 IF l=10 THEN LET l=58: GO TO tr
1743 LET l=10: GO TO tr

1759 REM  UNLOCK ROUTINE

1760 GO SUB 1300: IF f=0 THEN RETURN
1761 IF l=13 AND o(4)=0 THEN LET o(20)=-1: LET o(21)=l: LET lu=1: RETURN
1764 GO TO ct

1779 REM  DIG ROUTINE

1780 IF o(16)<>0 OR l<4 OR l>9 THEN GO TO ct
1781 PRINT '"You have found ";
1782 IF l=9 AND o(4)=-1 THEN LET o(4)=l: PRINT "something"'"interesting!": GO TO tr
1783 PRINT "nothing at all": GO TO tr

1799 REM  EAT ROUTINE

1800 GO SUB 1300: IF f=0 THEN RETURN
1801 RESTORE oz+vn: READ s,s1,s1
1802 IF s<0 THEN GO TO ct
1803 GO SUB cs+s1: IF f=0 THEN GO TO ct
1804 PRINT "Thanks. I was getting peckish": LET o(vn)=-1: RETURN

1819 REM  RUB ROUTINE

1820 GO SUB 1300: IF f=0 THEN RETURN
1821 IF l<>48 OR vn<>7 THEN GO TO 1830
1822 PRINT '"A bridge appears before your    eyes across the chasm": LET o(15)=l: LET be=1: GO TO tr
1830 PRINT "Nothing happens": GO TO fa

1839 REM  JUMP ROUTINE

1840 IF l=48 OR l=50 THEN PRINT '"Oh dear, the fall has broken  your neck. It was no time to tryout your new wings": GO TO rr
1841 GO TO 1830

1859 REM  DRINK ROUTINE

1860 GO SUB 1300: IF f=0 THEN RETURN
1861 IF vn<>17 THEN GO TO ct
1862 PRINT '"Delicious! But I would really   prefer Captain Morgans": LET o(18)=o(vn): LET o(vn)=-1: RETURN

1880 REM  PUSH ROUTINE

1881 IF l<>25 THEN PRINT "Nothing moves": GO TO fa
1882 IF l=25 AND o(23)=l THEN PRINT '"The door is already open": GO TO fa
1883 IF l=25 THEN LET o(22)=-1: LET o(23)=l: LET gu=1: PRINT '"The heavy door slowly opens": GO TO tr

1899 REM  BREAK ROUTINE

1900 IF o(57)=0 AND l<>68 THEN PRINT "Vandalism is the lowest form of animal life": GO TO fa
1901 IF o(57)<>0 THEN GO TO ct
1902 IF l=68 AND o(57)=0 THEN LET o(46)=-1: LET o(50)=l: LET o(49)=l: LET o(47)=l: LET la=1: PRINT '"The lock is broken and falls     apart": RETURN

1919 REM  PRAY ROUTINE

1920 IF l<>71 THEN PRINT "This is not the place for it": GO TO fa
1921 IF l=71 AND dd=0 THEN LET o(48)=l: LET dd=1: PRINT "Your prayers have been answered": GO TO tr
1922 IF l=71 AND dd=1 THEN GO TO ct

1939 REM  READ ROUTINE
```


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Popular Computing Weekly
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```
1940 IF l=32 THEN PRINT '" 'THOS
E WHICH HAVE VIOLATED THE   INNE
R SANCTUARY SHALL PERISH'": GO T
O fa
1941 IF l=71 THEN PRINT '"The in
scription curved on the   block
is in the form of one     word o
nly - 'PRAY'": GO TO fa
1942 IF l=41 THEN PRINT '"There
are figures and strange   markin
gs etched into the rock   which
roughly translated mean    'IF Y
OU GO INTO THESE CAVES    REMEM
BER ALADDIN AND HIS LAMP'": GO T
O fa
1943 IF l=11 THEN PRINT '" 'GREA
T SPIRIT RID US OF THE      TERR
IBLE EVIL WHICH LIVES       WITH
IN OUR TEMPLE'             There
is more but the paper is  old an
d too worn to read.": GO TO fa
1944 IF l=59 THEN PRINT '" 'YOU
HAVE FALLEN INTO THE SAME   TRAP
 AS MANY BEFORE YOU. THE    ONLY
 WAY OUT IS UP'": GO TO fa
1945 IF l=35 THEN PRINT '" 'HUMA
N SACRIFICE TO THE GREAT    SUN-
GOD'": GO TO fa
1946 GO TO ct

1959 REM  EXAMINE ROUTINE

1960 IF l=11 THEN PRINT '"On clo
ser inspection you see a  note a
ttached to the inside of  the ca
noe, in front of the seat.": GO
TO fa
1961 IF l=71 OR l=41 OR l=32 OR
l=35 OR l=59 THEN PRINT '"There
seems to be some form of  inscri
ption": GO TO fa
1962 GO TO ct

1979 REM  REVEAL ROUTINE

1980 IF l<>88 AND l<>50 THEN GO
TO 1830
1981 PRINT '"You find something
you hadn't   noticed before"
1982 IF l=88 THEN LET o(51)=l
1983 IF l=50 THEN LET o(34)=l
1984 GO TO tr
1990 REM  OBJECT SEARCH

1997 PRINT "You cannot do that"
1998 LET f=0: RETURN
1999 LET f=1: RETURN
2000 LET x=0: PRINT q$
2010 RESTORE os+1: FOR i=1 TO oc
: READ m$
2020 IF l<>o(i) THEN GO TO 2030
2021 LET x=1: PRINT "  a";
2022 LET z$=m$(1 TO 1): IF z$="a
" OR z$="e" OR z$="i" OR z$="o"
OR z$="u" THEN PRINT "n";
2024 PRINT " ";m$
2030 NEXT i
2040 IF x=0 THEN PRINT "  nothin
g"
2050 RETURN

6999 REM  VERB LISTING

7000 DATA 25
7001 DATA "north","south","east"
,"west","up","down"
7002 DATA "take","drop","kill","
inventory","score"
7003 DATA "cut","dive","unlock",
"dig"
7004 DATA "eat","rub","jump","dr
ink"
7005 DATA "push","break","pray",
"read"
7006 DATA "examine","reveal"

7097 REM  GENERAL CONDITIONS
7098 REM  OBJECT NUMBER AND
7099 REM  MONSTER DISSAPPEARS

7100 GO TO tr
7101 GO TO fa+lu
7102 GO TO fa+gu
7103 GO TO fa+be
7104 GO TO fa+(o(3)=0)
7105 GO TO fa+(o(11)=-1): REM
Rattlesnake
7106 GO TO fa+(o(12)=-1): REM
Pirate
7107 GO TO fa+(o(10)=-1): REM
Native
7108 GO TO fa+(o(26)=-1): REM
Gorilla
7109 GO TO fa+(o(29)=-1): REM
Crocodile
7110 GO TO fa+(o(35)=-1): REM
Diplodocus
7111 GO TO fa+(o(25)=-1): REM
Vampire bat
7112 GO TO fa+(o(41)=0)
7113 GO TO fa+(o(44)=0)
7114 GO TO fa+(o(55)=-1): REM
Pteranodon
7115 GO TO fa+(o(53)=-1): REM
Lizard
7116 GO TO fa+(o(22)=-1)

7149 REM  RUM CONDITION

7150 IF o(17)<>0 THEN GO TO tr
7151 LET o(17)=-1: LET o(12)=-1:
 PRINT '"As you enter the pirate
 whips   the rum from your hand
and runs away towards the direct
ion of   the beach..": GO TO tr
7160 PRINT '"You have been kille
d by the Incaspirits!": GO TO rr

7998 REM  OBJECTS DATA FORMAT
7999 REM  NUMBER AND LOCATION

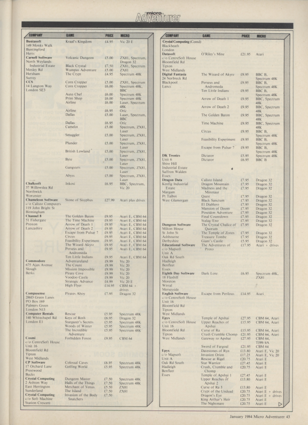
8000 DATA 57,1,15,57,-1,21,18,1,
100,58,27,30,42,32,-1,-1,5,16,-1
,26,13,-1,25,-1,22,38,21,12,38,5
1,57,30,27,51,-1,100,57,57,26,11
,42,44,59,59,28,40,68,-1,-1,-1,-
1,-1,82,82,72,95,95,43
8001 DATA "flare"
8002 DATA "machete"
8003 DATA "air tank"
8004 DATA "key"
8005 DATA "anchor"
8006 DATA "foghorn"
8007 DATA "lantern"
8008 DATA "rudder"
8009 DATA "compass"
8010 DATA "native"
8011 DATA "rattlesnake"
8012 DATA "pirate"
8013 DATA "inca spirit"
8014 DATA "canvas"
8015 DATA "bridge spanning the c
hasm"
8016 DATA "spade"
8017 DATA "rum bottle"
8018 DATA "empty bottle"
8019 DATA "vine hanging from the
 tree"
8020 DATA "cane door"
8021 DATA "open door"
8022 DATA "stone door"
8023 DATA "door open wide"
8024 DATA "cross"
8025 DATA "vampire bat"
8026 DATA "gorilla"
8027 DATA "blowpipe"
8028 DATA "tiller"
8029 DATA "crocodile"
8030 DATA "cutlass"
8031 DATA "chain"
8032 DATA "jib"
8033 DATA "genoa"
8034 DATA "pulley"
8035 DATA "diplodocus"
8036 DATA "table"
8037 DATA "chart"
8038 DATA "knife"
8039 DATA "canoe"
8040 DATA "sextant"
8041 DATA "rope"
8042 DATA "halyard"
8043 DATA "transmitter"
8044 DATA "bucket"
8045 DATA "telescope"
8046 DATA "chest"
8047 DATA "open chest"
8048 DATA "dinghy"
8049 DATA "pump"
8050 DATA "wetsuit"
8051 DATA "staysail"
```

ADVENTURE FILE

The most complete listing available of adventures, war games and real-life simulations — new entries are printed in italic and should be sent to Adventure File, Micro Adventurer, 12-13 Little Newport St, London WC2R 3LD

COMPANY	GAME	PRICE	MICRO
Abacus 716 Llangyfelech Rd Treboech Swansea	Into the Labyrinth	£5.99	Dragon 32, Vic 20
	Domain	£4.95	Spectrum
Abbex Tavistock House 34-36 Bromham Rd Bedford	Faust's Folly	£5.95	Spectrum
Abersoft 7 Maes Afallen Bow St Dyfed	Adventure 1	£5.95	ZX81
	Adventure 1	£6.95	Spectrum 48K
Abrasco The Grange Barn Pike's End Eastcote Middx	Pirate	£8.50	Dragon 32
Acornsoft 4A Market Hill Cambridge	Philosopher's Quest	£9.95	BBC B
	Castle of Riddles	£9.95	BBC B
	Sphinx Adventure	£9.95	BBC B
	Countdown to Doom	£9.95	BBC B
	Kingdom of Hamil	£9.95	BBC B
Addictive Games Albert House Albert Rd Bournemouth	Football Manager	£5.95	ZX81
	Football Manager	£6.95	Spectrum 48K
Adventure International c/o Calisto Computers 119 John Bright St Birmingham	Scott Adams Adventures: Adventureland, Pirate Adventure, Mission Impossible, Voodoo Castle, The Count, Strange Odyssey, Mystery Fun House, Pyramid of Doom, Ghost Town, Savage Island Parts I and II, Golden Voyage	£16.99 each on cassette, £28.95 on disk	Atari E (only the first two adventures are on disk)
	Galactic Empire	£14.95	Atari E
	Galactic Trader	£14.50	Atari E
	Treasure Quest	£10.95	Atari E
	Triad	£25.49	Atari E
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	Zodiac	£6.90	Atom, Oric
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Algray Software Ahed House Dewsbury Rd Ossett Wakefield	Fortress of Evil	£7.95	Colour Genie
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Analog Software c/o Mapsoft Unit A Oak Rd South Hadleigh Benfleet Essex	Analog Adventure	£16.95	Atari E + drives
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	Pharaoh's Tomb	£5.95	Vic 20 E
	Zok's Kingdom	£5.95	Vic 20 E
	The Dungeon	£5.95	Vic 20 E
Artic	Planet of Death	£5.95	ZX81
	Planet of Death	£6.95	Spectrum 48K
Artic (Contd) Main St Brandesburton Driffield Yorks	Inca Curse	£5.95	ZX81
	Inca Curse	£6.95	Spectrum 48K
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	Ship of Doom	£6.95	Spectrum 48K
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	Groucho	£10.00	Spectrum 48K
Avalon Hill 650 High Rd London N12	B1 Bomber	£11.95	Atari, TRS80 I and III, CBM 64, Pet
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	Close Assault	£21.95	Atari E, Apple II, TRS80 I and III
	Paris in Danager	£25.95	Atari + drives
	Telengard	£17.45	Atari E, Apple II + drives, TRS80 I and III, CBM 64, Pet
	GFS Sorceress	£21.95	Atari E, Apple II, TRS80 I and III
	Empire of Overmind	£21.95	Atari E, Apple II, TRS80 I and III
	Lords of Karma	£14.95	Atari E, Apple II, TRS80 I and III
	Fredericksburg	£25.95	TRS80 I and III + drives
	Tactical Armour Command	£28.95	Apple II + drives
	Galaxy	£14.95	Atari E
	Voyager I	£14.95	Atari E, Commodore Pet, IBM PC
	Andromeda Conquest	£13.45	Atari
	Controller	£18.95	Atari
	Planet Miners	£11.96	Atari E
	Scram	£19.99	Atari
Bamby Software Leverburgh Isle of Harris	Golden Apples	£5.95	Dragon 32
	Planetary Trader	£5.95	Dragon 32
	Surprise	£8.95	Dragon 32
	Alien Odyssey	£9.95	Dragon 32
	Scanner 13	£8.45	Dragon 32
	Mystery Manor	£6.50	Spectrum 48K
	Alone at Sea	£6.50	TI99/4A
	Nodrug's Quest	£8.45	TI99/4A
	Underground Adventure	£8.45	TI99/4A
Bug-Byte Software Mulberry House Canning Place Liverpool	The Castle	£6.95	Spectrum, Oric
	Dictator	£9.00	ZX81
	Dragonquest	£11.50	BBC
	Damsel and the Beast	£6.50	ZX81
	Adventure	£5.95	ZX81
	Old Father Time	£9.50	BBC B

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COMPANY	GAME	PRICE	MICRO
Buntasoft 149 Monks Walk Buntingford Herts	Kraal's Kingdom	£4.95	Vic 20 E
Carnell Software North Weylands Industrial Estate Mosley Rd Hersham Surrey	Volcanic Dungeon	£5.00	ZX81, Spectrum, Dragon 32
	Black Crystal	£7.50	ZX81, Spectrum
	Wumpus Adventure	£5.00	ZX81
	The Crypt	£4.95	Spectrum 48K
CCS 14 Langton Way London SE3	Corn Cropper	£5.00	ZX81, Spectrum
	Corn Cropper	£6.00	Spectrum 48K, BBC
	Auto Chef	£6.00	Spectrum 48K
	Print Shop	£6.00	Spectrum 48K
	Airline	£6.00	Laser, Spectrum 48K
	Airline	£6.95	Oric
	Dallas	£5.00	Laser, Spectrum, BBC
	Dallas	£6.95	Oric
	Camelot	£5.00	Spectrum, ZX81, Laser
	Smuggler	£5.00	Spectrum, ZX81, Laser
	Plunder	£5.00	Spectrum, ZX81, Laser
	British Lowland	£5.00	Spectrum, ZX81, Laser
	Byte	£5.00	Spectrum, ZX81, Laser
	Gangsters	£5.00	Spectrum, ZX81, Laser
	Abyss	£5.00	Spectrum, ZX81, Laser
Chalksoft 37 Willowslea Rd Northwick Worcester	Inkosi	£6.95	BBC, Spectrum, Vic 20
Chameleon Software c/o Calisto Computers 119 John Bright St Birmingham	Stone of Sisyphus	£27.99	Atari plus drives
Channel 8 51 Fishergate Preston Lancashire	The Golden Baton	£9.95	Atari E, CBM 64
	The Time Machine	£9.95	Atari E, CBM 64
	Arrow of Death 1	£9.95	Atari E, CBM 64
	Arrow of Death 2	£9.95	Atari E, CBM 64
	Escape from Pulsar 7	£9.95	Atari E, CBM 64
	Circus	£9.95	Atari E, CBM 64
	Feasibility Experiment	£9.95	Atari E, CBM 64
	The Wizard Akyrz	£9.95	Atari E, CBM 64
	Perseus and Andromeda	£9.95	Atari E, CBM 64
	Ten Little Indians	£9.95	Atari E, CBM 64
Commodore 675 Ajax Avenue Slough Berks	Adventureland	£9.99	Vic 20
	The Count	£9.99	Vic 20
	Mission Impossible	£9.99	Vic 20
	Pirate Cove	£9.99	Vic 20
	Voodoo Castle	£9.99	Vic 20
	Strategic Advance	£4.99	Vic 20 E
	High Flyer	£14.95	CBM 64 + drives
Compusense 286D Green Lanes PO Box 169 Palmers Green London N13	Pirates Ahoy	£7.95	Dragon 32
Computer Rentals 140 Whitechapel Rd London E1	Rescue	£5.95	Spectrum 48K
	Keys of Roth	£6.95	Dragon 32
	Stargazer's Secrets	£5.95	Spectrum 48K
	Woods of Winter	£5.95	Spectrum 48K
	The Incredible Adventure	£5.95	Spectrum 48K
Cosmi c/o CentreSoft House Unit 16 Bloomfield Rd Tipton West Midlands	Forbidden Forest	£9.95	CBM 64
CP Software 17 Orchard Lane Prestwood Bucks	Colossal Caves	£6.95	Spectrum 48K
	Golfing World	£5.95	Spectrum 48K
Crystal Computing 2 Ashton Way East Herrington Sunderland	Dungeon Master	£7.50	Spectrum 48K
	Halls of the Things	£7.50	Spectrum 48K
	Merchant of Venus	£5.50	ZX81
	The Island	£7.50	ZX81
Crystal Computing c/o Soft Machine Station Crescent	Invasion of the Body Snatchers	£7.50	
Crystal Computing (Contd) Blackheath London			
Datasoft c/o CentreSoft House Bloomfield Rd Tipton West Midlands	O'Riley's Mine	£21.95	Atari
Digital Fantasia 24 Norbreck Rd Blackpool Lancs	The Wizard of Akyrz	£9.95	BBC B, Spectrum 48K
	Perseus and Andromeda	£9.95	BBC B, Spectrum 48K
	Ten Little Indians	£9.95	BBC B, Spectrum 48K
	Arrow of Death 1	£9.95	BBC, Spectrum 48K
	Arrow of Death 2	£9.95	BBC, Spectrum 48K
	The Golden Baton	£9.95	BBC, Spectrum 48K
	Time Machine	£9.95	BBC, Spectrum 48K
	Circus	£9.95	BBC B, Spectrum 48K
	Feasibility Experiment	£9.95	BBC B, Spectrum 48K
	Escape from Pulsar 7	£9.95	BBC B, Spectrum 48K
DK Tronics Unit 6 Shire Hill Industrial Estate Saffron Walden Essex	Dictator	£5.95	Spectrum 48K
	Dictator	£6.95	BBC B
Dragon Data Kenfig Industrial Estate Margam Pt Talbot West Glamorgan	Calisto Island	£7.95	Dragon 32
	Dragon Mountain	£7.95	Dragon 32
	Madness and the Minotaur	£7.95	Dragon 32
	Quest	£7.95	Dragon 32
	Black Sanctum	£7.95	Dragon 32
	El Diablero	£7.95	Dragon 32
	Mansion of Doom	£7.95	Dragon 32
	Poseidon Adventure	£7.95	Dragon 32
	Final Countdown	£7.95	Dragon 32
	Stalag/Eno	£7.95	Dragon 32
Dungeon Software Milton House St John St Ashbourne Derbyshire	The Crystal Chalice of Quorum	£7.95	Dragon 32
	The Temple of Zoren	£7.95	Dragon 32
	Treasure Tombe	£7.95	Dragon 32
	Giant's Castle	£5.95	Dragon 32
Educational Software c/o Mapsoft Unit A Oak Rd South Hadleigh Benfleet Essex	The Adventures of Proto	£17.95	Atari + drives
Eighth Day Software 18 Flaxhill Moreton Wirral Merseyside	Dark Lore	£6.95	Spectrum 48K, ZX81
English Software c/o CentreSoft House Unit 16 Bloomfield Rd Tipton West Midlands	Escape from Perilous	£14.95	Atari
Epyx c/o CentreSoft House Unit 16 Bloomfield Rd Tipton West Midlands	Temple of Apshai	£27.95	CBM 64, Atari
	Upper Reaches of Apshai	£15.95	CBM 64, Atari
	Curse of Ra	£15.95	CBM 64, Atari
	Crush Crumble Chomp	£21.95	CBM 64, Atari
	Gateway to Apshai	£27.95	CBM 64, TI99/4A
	Sword of Fargoal	£21.95	CBM 64
Epyx c/o Mapsoft Unit A Oak Rd South Hadleigh Benfleet Essex	Datestones of Ryn	£13.80	Atari E, Vic 20
	Invasion Orion	£17.25	Atari E, Vic 20
	Rescue at Rigel	£20.75	Atari E
	Star Warrior	£27.45	Atari E
	Crush, Crumble and Chomp	£20.75	Atari E
	Temple of Apshai 1	£27.45	Atari E
	Upper Reaches of Apshai 2	£13.80	Atari E
	Curse of Ra 3	£13.80	Atari E
	Crypt of the Undead	£20.75	Atari E + drives
	Dragon's Eye	£20.75	Atari E + drives
	King Arthur's Heir	£20.75	Atari E
	The Nightmare	£20.75	Atari E

COMPANY	GAME	PRICE	MICRO
◁ **Epyx** (Contd)			+ drives
	Hellfire Warrior	£27.45	Atari E
	Danger in Drindisti 2	£13.80	Atari E
	The Keys of Acheron 3	£13.80	Atari E
	Monster Maze	£27.45	Atari E, Vic 20
	Escape Vulcan's Isle	£20.75	Atari E + drives
Exodus Penrice Drive Tividale Warley West Midlands	Pyramid	£4.95	Dragon 32
	Espionage	£4.95	Dragon 32
Felix Software 19 Leighton Ave Pinner Middlesex	Tomb of Dracula	£4.95	Spectrum 48K
	Tomb of Dracula	£3.95	ZX81
Gebelli c/o Mapsoft Oak Rd South Hadleigh Benfleet Essex	Dr Goodcode's Tavern	£21.95	Atari E + drives
Gemtime 16 Ben Ledi Rd Kirkcaldy	Murder at the Manor	£6.95	Spectrum 48K
Gilsoft 30 Hawthorn Rd Barry South Glamorgan Wales	Tasks/Time-line	£4.95	Spectrum
	Magic Castle	£4.95	Spectrum 48K
	Diamond Trail	£4.95	Spectrum 48K
	The Quill	£14.95	Spectrum 48K
Golem 77 Qualitas Bracknell Berks	Katakombs	£8.00	BBC B
Hewson Consultants 60A St Mary's St Wallingford Oxon	Heathrow: ATC	£7.95	Spectrum
	Nightflite	£5.95	Spectrum
	Dragonfly	£6.95	Dragon 32
	Quest Adventure	£5.95	Spectrum 48K
Impact Software 70 Redford Avenue Edinburgh	Orb	£5.00	Dragon 32, Vic 20 E, Spectrum 48K
	The Quest	£5.00	Dragon 32, Spectrum 48K
	3D Maze	£5.00	Dragon 32, Spectrum 48K
Infocom c/o Softsel Central Way Feltham Middx	Zork I, II and III	£28.75 each	Apple, Atari, CBM 64, IBM PC, TI Professional, CP/M systems (all plus drives)
Infocom c/o CentreSoft House Unit 16 Bloomfield Rd Tipton West Midlands	Deadline	£37.95	Atari E + drives
	Starcross	£37.95	Atari + drives
	Suspended	£37.95	Atari E + drives
	Witness	£37.95	Atari E + drives
	Planetfall		Atari E
	Castle Colditz		Spectrum 48K
JRS Software 19 Wayside Ave Worthing Sussex	Lost Island	£3.95	ZX81
	Battleships	£3.95	ZX81
J V Software c/o Mapsoft Unit A Oak Rd South Hadleigh Benfleet Essex	Journey to the Planets	£20.45	Atari E
	Green Ring	£7.00	Spectrum
Kenema Associates 1 Marlborough Drive Worle Avon	Hell's Temple	£12.00	Oric 48K
Kew Enterprises 14 Fairway Ave Manchester	Secret Mission	£5.00	Vic 20 E
Legend 1 Milton Rd Cambridge	Valhalla	£14.95	Spectrum 48K
Level 9 Computing 229 Hughenden Road High Wycombe Bucks	Colossal Adventure	£9.90	CBM 64, Atari, Oric, Lynx, BBC, Spectrum, Nascom
	Adventure Quest	£9.90	CBM 64, Atari, Oric, Lynx, BBC, Spectrum, Nascom
	Dungeon Adventure	£9.90	CBM 64, Atari, Oric, Lynx, BBC, Spectrum, Nascom
	Snowball	£9.95	CBM 64, Atari, Oric, Lynx, BBC, Spectrum 48K
MC Lothlorien 4 Granby Rd Cheadle Hulme Cheadle Cheshire	Samurai Warrior	£4.50	ZX81
	Samurai Warrior	£6.95	Dragon 32
	Peloponnesian War	£4.50	ZX81
	Johnny Reb	£5.50	Spectrum 48K
	Privateer	£4.50	ZX81, Spectrum 48K
	Paras	£6.95	BBC B
	Roman Empire	£4.50	ZX81
	Roman Empire	£6.95	BBC B, Dragon 32
	Roman Empire	£12.50	Atari E
	Tyrant of Athens	£4.50	ZX81
	Tyrant of Athens	£6.95	Dragon 32
	Warlord	£5.50	Spectrum 48K
	Warlord	£6.95	Oric 48K, Dragon 32
	Warlord	£4.50	ZX81
	Roman Empire	£5.50	Spectrum 48K
	Bedlam	£5.95	Spectrum 48K
	Confrontation	£7.95	Spectrum 48K
	Dreadnaughts	£5.95	Spectrum 48K
	Red Baron	£5.95	Spectrum 48K
	Battle Zone 2000	£6.95	BBC
Martech Games 9 Dillingburgh Rd Eastbourne Sussex	Galaxy Conflict	£11.95	ZX81, Spectrum
	Galaxy Conflict	£14.75	BBC B, Dragon 32, CBM 64, Atari E
	Conflict	£11.95	ZX81, Spectrum
	Conflict	£14.75	BBC B, Dragon 32, CBM 64, Atari E
Martech c/o Soft Machine Station Crescent Blackheath London	Quest of Merravid	£7.95	CBM 64, Vic 20
Melbourne House 131 Trafalgar Rd London SE10	The Hobbit	£14.95	Spectrum 48K, CBM 64, BBC, Oric
	The Wizard and the Princess	£5.95	Vic 20
Microdeal 41 Truro Rd St Austell Cornwall	Phantom Slayer	£8.00	Dragon 32
	Mansion Adventure 1	£8.00	Dragon 32
	Space Monopoly	£8.00	Dragon 32
	Keys of the Wizard	£8.00	Dragon 32
	Jerusalem Adventure	£8.00	Dragon 32
	Williamsburg Boulevard	£8.00	Dragon 32
	Ultimate Adventure	£8.00	Dragon 32
	Escape	£8.00	Dragon 32
Mikro-Gen 24 Agar Crescent Bracknell Berks	Sorcerer's Castle	£5.50	Spectrum
	Mad Martha	£5.50	Spectrum
	Mines of Saturn/ Return to Earth	£5.95	Spectrum
Molimerx 1 Buckhurst Rd Town Hall Square Bexhill-on-Sea East Sussex	Mysterious Adventures: Golden Baton, Time Machine, Arrow of Death Parts I and II, Escape from Pulsar 7, Circus, Feasibility Experiment, Wizard of Akyrz, Perseus and Andromeda, Ten Little Indians	£10.06 each	TRS80 I and III, Video Genie I and II, Colour Genie, BBC B
	Epic Hero: Ocean Hunt, Dungeon of Derojhen, Venus Must Live	£10.06 each	TRS80 I and III, Video Genie I and II
	Battle of Britain	£15.53	TRS80 I and III, Video Genie I and II
	Concorde	£17.25	TRS80 I and III, Video Genie I and II
	Fairytale	£10.06	TRS80 I and III, Video Genie I and II
	Wonderland	£10.06	TRS80 I and III, Video Genie I and II
	Dreamworld	£10.06	TRS80 I and III, Video Genie I and II
	Everest Explorer	£10.06	TRS80 I and III, Video Genie I and II
	Temple of Bast	£10.06	TRS80 I and III, Video Genie I and II ▷

COMPANY	GAME	PRICE	MICRO
◁	Wumpus	£6.32	TRS80 I and III, Video Genie I and II
Mr Micro	Dracula	£6.90	Oric E
69 Partington Lane	Mysterious Island	£9.90	Vic 20 E
Swinton	Gold Rush	£6.90	Vic 20
Manchester			
Muse Software	Castle Wolfenstein	£21.55	Apple, Atari (both plus drives)
c/o Softsell			
Central Way			
Feltham			
Middx			
Newsoft	Black Dwarf's Lair	£4.95	Spectrum
12 Whitebroom Rd	Time Bandits	£4.95	Spectrum
Warners End	Secret Valley	£4.95	Spectrum
Hemel Hempstead	Great Western	£4.95	Spectrum
Herts	Spectral Maze	£4.95	Spectrum
On-Line Systems	Mission: Asteroid	£17.19	Atari E + drives
c/o Mapsoft	Wizard and the Princess	£21.79	Atari E + drives
Unit A			
Oak Rd South	Ulysses and the Golden Fleece	£20.64	Atari E + drives
Hadleigh			
Benfleet			
Essex			
Peaksoft	Death's Head Hole	£5.45	Dragon 32, BBC B, Spectrum 48K
7 Hawthorn Crescent			
Burton-on-Trent	Don't Panic	£5.45	Dragon 32
Derbyshire	Lionheart	£5.45	Dragon 32
	Champions!	£6.95	Dragon 32, BBC B, Spectrum 48K, Oric 48K, Electron
Penguin	Spy's Demise	£15.95	Atari
c/o CentreSoft House,	The Spy Strikes Back	£15.95	Atari
Unit 16			
Bloomfield Rd			
Tipton			
West Midlands			
Phipps Associates	Knight's Quest	£4.95	Spectrum, ZX81
99 East St	Greedy Gulch	£4.95	ZX81
Epsom	Magic Mountain	£4.95	Spectrum
Surrey	Adventure	£5.00	ZX81
	Novotnick Puzzle	£5.00	ZX81
	Gorgon	£4.95	Spectrum 48K
	Black Planet	£5.95	Spectrum 48K
	The Forest	£9.95	Spectrum 48K
Pixel Games	Trader	£9.95	ZX81, Spectrum
c/o Quicksilva		£14.95	Vic 20
92 Northam Rd			
Southampton			
Portent Adventures	Robin Hood	£5.95	Dragon 32
	Lost Tower of Tintagel	£6.96	Dragon 32
Premier	Adventure Plus	£7.95	Dragon 32
208 Croydon Road	House of Horrors	£4.95	Dragon 32
London SE20	Caverns of Doom	£4.95	Dragon 32
	Dungeons of Death	£6.95	Dragon 32
	Dragon Power	£7.95	Dragon 32
	Plant	£5.95	Dragon 32
	Oil Recovery	£5.95	Dragon 32, Video Genie, TRS80 I and III
Program Power	Adventure	£7.95	BBC
8/8A Regent St	Eldorado Gold	£6.95	BBC B
Chapel Allerton	Labyrinths of La Coshe	£7.95	BBC B
Leeds			
	Seek	£6.95	BBC
	Adventure	£6.95	BBC
	Caveman Adventure	£6.95	BBC
Protek	Airliner	£9.95	Spectrum 48K
c/o Soft Machine			
Station Crescent			
Blackheath			
London			
Psion	Flight Simulation	£7.95	Spectrum 48K
2 Huntsworth Mews			
Gloucester Place			
London NW1			
Quality Software	Ali Baba	£24.95	Atari E + drives
c/o CentreSoft House			
Unit 16			
Bloomfield Rd			
Tipton			
West Midlands			
Quicksilva	Trader	£9.95	ZX81, Spectrum
92 Northam Rd	Trader	£14.95	Vic 20
Southampton	Pioneer Trail	£3.95	ZX81
	Ocean Trader	£3.95	ZX81
	Smuggler's Cove	£6.95	Spectrum 48K
	Velnor's Lair	£6.95	Spectrum 48K

COMPANY	GAME	PRICE	MICRO
Quicksilva (Contd)	Xadom	£6.95	Spectrum 48K
	Ring of Power	£9.95	CBM 64
Red Shift	Apocalypse	£9.95	Spectrum 48K, BBC B
12C Manor Road			
London N16	Apocalypse Expansion: Maps	£4.95	Spectrum 48K
	Apocalypse Expansion: Ancient Scenarios	£4.95	Spectrum 48K
	Apocalypse Expansion: Modern Scenarios	£4.95	Spectrum 48K
Red Shift	Apocalypse	£9.95	BBC
c/o Soft Machine			
Station Crescent			
Blackheath			
London			
Rocklan	Wizard of Wor	£29.95	Atari E + drives
c/o CentreSoft House			
Bloomfield Rd			
Tipton			
West Midlands			
Romik Software	Tombs of Xeiops	£6.99	CBM 64
272 Argyll Ave	Fool's Gold	£6.99	CBM 64
Slough	The Golden Apples of Zeus	£4.99	Vic 20, 8, 16K
Berks			
	Animal Magic	£5.99	Vic 20, 16K
	Zorgon's Kingdom	£6.99	Vic 20, 8, 16K
	3D Monster Chase	£6.99	Spectrum 16, 48K
	3D Monster Craze	£9.99	Lynx
	White Crystal	£6.99	Dragon 32
	Strategic Command	£6.99	Dragon 32
	Sub	£5.99	Spectrum 16, 48K
Salamander	Franklin's Tomb	£9.95	Dragon 32, Oric 48K, BBC B
17 Norfolk Rd			
Brighton	Wizard War	£7.95	Dragon 32
Sussex	Lost in Space	£9.95	Dragon 32
	Everest	£7.95	Dragon 32
	Night Flight	£7.95	Dragon 32
	737 Flight Simulator	£9.95	BBC B
Saturn Software	Tomb of Tuthmosis	£5.50	Dragon 32
Sycamores	Wax Works	£5.50	Dragon 32
Somersham	Volcano Island	£7.00	BBC B
Cambs			
Severn Software	Grail	£6.95	Oric 48K
5 School Crescent	Moria	£4.95	Spectrum
Lydney	Moria	£6.95	Oric 48K
Glos			
Shards Software	Pettigrew's Diary	£7.95	Dragon 32
189 Eton Rd			
Ilford			
Essex			
Richard Shepherd Software	Super Spy	£6.50	Spectrum 48K
	Transylvanian Tower	£6.50	Spectrum 48K
Elm House	Everest Ascent	£6.50	Spectrum 48K
23-25 Elmshott Lane	Ship of the Line	£4.95	Spectrum
Cippenham	Ship of the Line	£6.50	Spectrum 48K, CBM 64
Slough			
Berks	Invincible Island	£6.50	Spectrum 48K, CBM 64
	Devils of the Deep	£6.50	Spectrum 48K
Sierra On-Line Systems	Mission Asteroid	£17.95	Atari plus drives
	Mission Asteroid	£14.35	Apple plus drives
c/o Softsel	Mystery House	£17.95	Apple plus drives
Central Way	Wizard and Princess	£23.70	Atari, Apple (both plus drives)
Feltham			
Middx	Cranston Manor	£28.75	Atari plus drives
	Cranston Manor	£25.50	Apple plus drives
	Ulysses and the Golden Fleece	£25.50	Apple, IBM PC (both plus drives)
	Time Zone	£71.95	Apple plus drives
Silverlind	Haunted House	£6.00	BBC B
156 Newton Rd	Journey to the Stars	£6.50	BBC B
Burton-on-Trent	Passport to Death	£6.50	BBC B
Staffs	Pentiles	£6.50	BBC B
	Othello	£6.95	BBC B
Sinclair	Embassy Assault (also see under Psion and Artic)	£4.95	Spectrum
Stanhope Rd			
Camberley			
Surrey			
Sirius	Fantastic Voyage	£27.95	Atari E + drives
c/o CentreSoft House			
Unit 16			
Bloomfield Rd			
Tipton			
West Midlands			
Soft Toys	The Lair	£6.00	Vic 20
14 Lockharton Ave	Star Warp II	£6.00	Vic 20
Edinburgh			
Software For All	JR	£6.95	BBC
72 North St	Space Kingdom	£7.95	BBC B
London N6	Area Radar Controller	£6.95	BBC B



COMPANY	GAME	PRICE	MICRO
Spectrum	Realms of the Undead	£5.50	Spectrum 48K
c/o CentreSoft House			
Unit 16			
Bloomfield Rd			
Tipton			
Sulis Educational Software	Time Traveller	£7.95	Spectrum, BBC
4 Church St			
Abbey Green			
Bath			
Superb Software	The Island	£10.00	CBM 64
9B Oval Rd			
London NW1			
Supersoft	Goblin Towers	£9.95	CBM 64
Winchester House	Streets of London	£9.95	CBM 64
Canning Rd	Forestland	£9.95	CBM 64
Wealdstone	Cosmic Capers	£7.95	CBM 64
Harrow	Cracks of Fire	£7.95	CBM 64
Middlesex	Catacombs	£27.00	Pet + drives
	Weird Wood	£25.00	Pet + drives
	Cornucopia	£35.00	Pet + drives
	Goblin Towers	£14.00	Pet + drives
	Cosmic Capers	£16.00	Pet + drives
	Cracks of Doom	£16.00	Pet + drives
Swifty	Space Module 1	£18.95	Atari E + drives
c/o Mapsoft			
Unit A			
Oak Rd South			
Hadleigh			
Benfleet			
Essex			
Synapse	Shamus I	£24.95	Atari, CBM 64
c/o CentreSoft House	Shamus II	£24.95	Atari E
Unit 16	Necromancer	£24.95	Atari E
Bloomfield Rd			
Tipton			
West Midlands			
Temptation Software	Dungeons of Doom	£5.95	Spectrum 48K, ZX81
27 Cinque Ports St			
Rye	Admiral Graf Spee	£5.95	Spectrum 48K ZX81
East Sussex			
	Special Mission	£5.95	TI99/4A E
	Baron	£5.95	Spectrum 48K, ZX81
Terminal Software	Curse of the Werewolf	£9.95	Vic 20 E
28 Church Lane	Rescue from Castle Dread	£9.95	Vic 20 E
Prestwich			
Manchester	Magic Mirror	£9.95	Vic 20 E
	Nosferatu	£9.95	Vic 20 E
	Space Island	£6.95	Spectrum 48K
	Vampire Village	£6.95	Spectrum 48K
Ultimate	Atic Atac	£5.50	Spectrum 48K
The Green	Lunar Jetman	£5.50	Spectrum 48K
Ashby-de-la-Zouch			
Leics			
Virgin Games	Castle Adventure	£6.95	Dragon 32
61-63 Portobello Rd			
London W11			
Wintersoft	Ring of Darkness	£9.95	Dragon 32
30 Uplands Park Rd	Operation Gremlin	£6.95	Oric 48K
Enfield			
Middx			
Work Force	Adventure in Time	£7.00	ZX81, Spectrum 48K
140 Wilsden Ave			
Luton	Pirate Island	£6.50	Spectrum 48K
Beds			

NOTES TO THE TABLE

Atari

The programs will run on either the Atari 400 or 800 unless E is specified, in which case extra memory is needed on the 400.

BBC

The programs will run on either of the BBC micros unless the model B is specified, in which case extra memory is needed on the model A.

Drives

If a program needs a disk drive system this is specified in the micro column.

Spectrum

The programs will run on either Spectrum model unless 48K is specified.

ZX81

All programs need a 16K RAM pack.

ADVENTURE HELP

If you need advice or have some to offer write to Tony Bridge, Adventure Help, Micro Adventurer, 12-13 Little Newport St, London WC2R 3LD

I WANT to devote this month's column to one of the most sophisticated adventure games ever devised — Valhalla from Legend Software.

In some respects Valhalla has all the classic and well-tried ingredients — any adventure addict will recognise them.

It is set in the lands of Norse myth; Asgard, Midgard and the wastelands of hell. Valhalla is chock full of good and bad gods, magic artefacts, mysterious locked chests and quests to be fulfilled.

The big difference with Valhalla is that all these things appear on screen and any action has a visible consequence. This means that if you type "Thor pick up food" lo and behold a little character moves across the screen and picks up the food.

A full analysis of Valhalla will have to wait until another time but it's perhaps worth asking whether Valhalla is really an adventure at all. Already some of the hardened text adventure freaks can be heard muttering darkly about "takes all the imagination out of it . . . who wants to see everything anyway?"

I propose to treat that argument in the same way I would a pit of screaming fire demons — step neatly over it, and simply say that true adventure or not, a lot of adventurers are playing Valhalla.

Believers in the four-year-old whiz-kid myth are going to be sadly disappointed — there were none involved in the creation of Valhalla.

The program is the work of six people, a team created solely for the purpose of producing the game. Each person had a specialised area to work in and the project was co-ordinated by team leader John Peel who designed the map of the game.

The youngest team mentor is James Learmont, an 18-year-old responsible for the animation effects. The other team members are in their mid 20s and have had previous experience on mainframe computers.

Richard Edwards formerly worked at IBM and handled most of the machine code programming. Graham Asher worked out the logic of the characters' behaviour; their apparent independence is one of the most immediately impressive things about the game. The one woman on the team, Jan Ostler, worked on the balance of the game and gave the characters their personality.

Work began in February with the coding starting in March — it actually arrived in October to a rapturous reception.

I've had quite a few letters asking for hints and clues for playing Valhalla and I shall do my best to oblige, but unlike ordinary adventures it is really a matter of playing it for a long time and persuading other characters to help you.

Nevertheless, taking the Arturian space bull by the antennae, here are a few things it's worth remembering when you play: the more lofty gods are unlikely to be much help until well into the game when you've earned some prestige by daring deeds. Boldir is a good friend though (assuming you've decided to be a good).

All the quest objects are hidden in locked cupboards and chests. You will know when you have found them because when you type in 'What' to find out the contents of something, the computer will tell you the name of the objects. The first clue, Darkness in Midgard, is really very helpful: what can you see that is dark in Midgard?

If you lock something none of the other characters can open it. You don't need to carry quest objects with you, store them in chests and cupboards but don't forget where you put them. Let me know how you get on.

ADVENTURE CONTACT

MICRO Spectrum 48K **Adventure** The Hobbit **Problem** How do you get out of the goblin's dungeon, and how do you get the Ring? **Name** Peter Munro **Address** 36 Doods Park Rd, Reigate, Surrey.

MICRO Spectrum 48K **Adventure** Dungeon Adventure **Problem** How do I get past the carnivorous jelly and how do I reach the siren? **Name** Gwyn Owens **Address** 38 Redcliffe Walk, Wembley, Middlesex.

MICRO BBC B **Adventure** Castle of Riddles **Problem** How do I get out of the giant's shooting gallery without being shot? **Name** Jonathan Boyd **Address** 80 Greenside, Kendal, Cumbria.

MICRO BBC B **Adventure** Castle or Riddles **Problem** How do I get out of the jet-black passages, and how do I open the safe? **Name** K P Parker **Address** 1 Hopefield, Lowick Green, Ulverston, Cumbria.

MICRO Spectrum 48K **Adventure** Espionage Island **Problem** How to go down the river without being shot and the relevance of the graffiti on the table **Name** T Dawe **Address** 16 Waltham Rise, Melton Mowbray, Leics.

MICRO Spectrum 48K **Adventure** The Hobbit **Problem** How do you get out of the goblins' and Elven King's dungeon? **Name** R Allsop **Address** 81 Derby Rd, Chellaston, Derby.

MICRO Spectrum 48K **Adventure** The Hobbit **Problem** How do you get into the goblins' mountain? **Name** J A Denning **Address** 133 Morland Rd, Aldershot, Hants.

MICRO Spectrum 48K **Adventure** The Hobbit **Problem** How do you get past the waterfall? **Name** Paul Storey **Address** 10 Leyburn Cresent, Harold Hill, Romford, Essex.

MICRO Vic 20 **Adventure** Advertureland **Problem** I can find only eight treasures, where are the rest? Can you pass the bear without honey? **Name** Tony Hitchens **Address** Flyde College, The University, Bailrigg, Lancaster.

MICRO Dragon 32 **Adventure** Adventure 200 **Problem** How do you get past the snake? Which panel A-L in the pyramid? How do you get into the outbuilding next to the grain store? **Name** I Feeney **Address** 16 Surrey Way, Laindon West, Essex.

HAVE YOU BEEN staring at the screen for days, or given up in disgust, stuck in an adventure whose problems seem insurmountable? Adventure Contact may be the answer. This column is designed to put adventurers in touch with one another. When you're stumped a fellow adventurer may be able to help — and you may be able to solve other people's problems. If you are having difficulties with an adventure, fill in this coupon and send it to Adventure Contact, Micro Adventurer, 12/13 Little Newport St, London WC2R 3LD. We will publish Adventure Contact entries each month in this special column.

Micro ....

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Problem ....

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PBM

PBM magazine covers all aspects of the growing play-by-mail gaming hobby, with regular undates on the computer-moderated commercial games as well as details of the enormous number of "free" non-commercial ones. We also look at the prospects for modem and cable gaming and describe the American experience in this area.

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THE WAR MACHINE

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HAVE an adventurous New Year! The Hobbit £12.95, level 9, Digital Fantasia and Acornsoft Adventures £8.95. Lothlorian, Fantasy Quest, Artic, Virgin, A&F and many more all available at discount. (SAE stating machine.) Prices fully inclusive. Chipmunk Software, 64 Cherryhill Avenue, Dundonald BT16 0JD.

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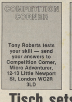
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Please cut out and send this form to: Classified Department, *Micro Adventurer*, 12-13 Little Newport Street, London WC2R 3LD





The best 20 answers we receive will win a copy of Roman Empire from Lothlorien. This adventure is available for the Spectrum 16K, BBC-B, Dragon 32, Atari 400/800 48K and the Tandy Colour 32K/ZX 81 16K — so let us know which version you want when you send in your competition entry.

Tisch sets sights on larger ring

TISCH, the black dragon, has actually been feeding you since last month's issue. She's mightily pleased that you succeeded in obtaining for her the second of the ancient Rings of Power.

As a reward (in addition to the baubs that the allowed you to keep from your previous exploits) she has flown out on two hunting missions bringing you back black, charred slabs of meat torn from some strangely shaped beast. But it's food and by now the stench that seems to be everywhere in the cave where she keeps you imprisoned has become bearable enough to permit eating.

However, it seems that there are more of the Rings ... at least one more because Tisch has given you this blood-stained map with the symbol of the Ring clearly marked in the central room.

As Tisch flies you over the maze your heart drops. Outside two of the entrances lie the great, pulsing bulks of two slug-like Pogg, which can move a fast as a man, leaving a corrosive trail as deadly to you as it is to them.

They're lying at opposite corners of the maze for their own safety. Should they ever actually touch the resultant uncontrolled chain reaction would destroy everything for miles.

The walls of the maze are too high for Tisch to pull you out once she has dropped you into the central room so you need to make your own way to one of the entrances carrying the Ring. But the Ring is enormous. It will make you much slower than the Pogg if they come after you. As Tisch drops you the Pogg rush into the maze, both trying to cut you off from the entrance through which they enter and the one opposite. They know that you can't run down a passageway already marked with their trails even if you can jump over the trail at a crossroad.

The only hope for you is to let one or both of the Pogg see you and divert it toward the trail of the other as it chases you. You should be able to keep just ahead of it provided you don't try to carry the Ring at the same time. With both Pogg dead you must leave a route back to fetch the Ring and to get out of the maze.

Of course as soon as the first Pogg sees you the other one will hear the commotion and come toward you by the shortest route no matter how you move. And if they actually meet you're dead anyway.

It takes a minute for you to move from square to square in the maze ... how many minutes will it take before you finally get out with the ring?

Your entry must arrive by the last working day in January.

The winners and the solution will be published in our March issue.

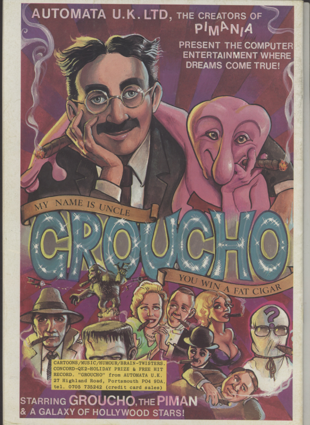
You may only enter once. Entries will not be acknowledged and we cannot enter into correspondence on the result.

November winners

HERE are the winners and the solution to the November competition: J. Pinfield, Droitwich; T. Briggs, Lyden; Stephen Marriott, New Duston; David Barr, Antrim; Barbara Logan, Northwood Hills; Jonathan Walford, Chelmsley Wood; S. Vickers, St Bees; S. Whitelaw, Basildon; Jeff Bird, Morayshire; Jerry Elsmore, Woking; T. Brown, Co Wicklow; E. Furnival, Rochdale; D. Tuck, Essex; Gary Ushaw, Newcastle-upon-Tyne; Christopher Glover, Newcastle-upon-Tyne; John Connor, York; Graeme Jones, Stockport; R. McLellan, Newcastle-upon-Tyne; Jorj Malinowski, Lancashire; D. Brain, Liverpool.

The treasure comprises half the gold coins, a gold key, a diamond on a chain and the ring for Tisch.

You should have entered and moved through the hexagonals in the following order: Firework, torch, troll, barrel, trapdoor, pool, wand, Gollum, Ring, ladder, dwarf, dragon, magic word, spider, chasm, giant, gold coins, soldiers, diamond on chain and exit.


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